FCC Test Report

Report No.:	RF151109C20-4
FCC ID:	QHQ-20430150
Test Model:	SimPad PLUS
Received Date:	Nov. 09, 2015
Test Date:	Nov. 24, 2015 ~ Dec. 21, 2015
Issued Date:	Dec. 29, 2015
Applicant:	LAERDAL MEDICAL AS
Address:	P.O. Box 377 Tanke Svilandsgate 30 4002 Stavanger
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch
Lab Address:	No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan (R.O.C)
Test Location:	No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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Release Control Record

Issue No.	Description	Date Issued
RF151109C20-4	Original Release	Dec. 29, 2015

1 Certificate of Conformity

Product:	Tablet
Brand:	Laerdal Medical AS
Test Model:	SimPad PLUS
Sample Status:	Identical Prototype
Applicant:	LAERDAL MEDICAL AS
Test Date:	Nov. 24, 2015 ~ Dec. 21, 2015
Standards:	47 CFR FCC Part 15, Subpart E (Section 15.407) ANSI C63.10:2013

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Evonne Liu , **Date:** Dec. 29, 2015

Evonne Liu / Specialist

Approved by : Stanley Wu , **Date:** Dec. 29, 2015

Stanley Wu / Assistant Manager

2 Summary of Test Results

47 CFR FCC Part 15, Subpart E (Section 15.407)			
FCC Clause	**Test Item**	**Result**	**Remarks**
15.407(b)(6)	AC Power Conducted Emissions	Pass	Meet the requirement of limit. Minimum passing margin is -3.80 dB at 25.00196 MHz.
15.407(b) (1/2/3/4/6)	Radiated Emissions & Band Edge Measurement	Pass	Meet the requirement of limit. Minimum passing margin is -1.05 dB at 5470 MHz.
15.407(a)(1/2/3)	Max Average Transmit Power	Pass	Meet the requirement of limit.
15.407(a)(1/2/3)	Peak Power Spectral Density	Pass	Meet the requirement of limit.
15.407(e)	6 dB Bandwidth	Pass	Meet the requirement of limit. (U-NII-3 Band only)
15.407(g)	Frequency Stability	Pass	Meet the requirement of limit.
15.203	Antenna Requirement	Pass	No antenna connector is used.

2.1 Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2:

Measurement	**Frequency**	**Expended Uncertainty (k=2) (±)**
Conducted Emissions at mains ports	150 kHz ~ 30 MHz	2.44 dB
Radiated Emissions up to 1 GHz	30 MHz ~ 200 MHz	2.93 dB
	200 MHz ~1000 MHz	2.95 dB
Radiated Emissions above 1 GHz	1 GHz ~ 18 GHz	2.26 dB
	18 GHz ~ 40 GHz	1.94 dB

2.2 Modification Record

There were no modifications required for compliance.

3 General Information

3.1 General Description of EUT

Product	Tablet
Brand	Laerdal Medical AS
Test Model	SimPad PLUS
Status of EUT	Identical Prototype
Power Supply Rating	12.0 Vdc (adapter) 3.8 Vdc (Li-ion battery)
Modulation Type	64QAM, 16QAM, QPSK, BPSK
Modulation Technology	OFDM
Transfer Rate	802.11a: 54.0/ 48.0/ 36.0/ 24.0/ 18.0/ 12.0/ 9.0/ 6.0 Mbps 802.11n: up to MCS7
Operating Frequency	5180 ~ 5240 MHz, 5260 ~ 5320 MHz, 5500 ~ 5700 MHz, 5745 ~ 5825 MHz
Number of Channel	5180 ~ 5240 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5260 ~ 5320 MHz: 4 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40) 5500 ~ 5700 MHz: 11 for 802.11a, 802.11n (HT20) 5 for 802.11n (HT40) 5745 ~ 5825 MHz: 5 for 802.11a, 802.11n (HT20) 2 for 802.11n (HT40)
Output Power	27.44 mW for 5180 ~ 5240 MHz 28.68 mW for 5260 ~ 5320 MHz 21.65 mW for 5500 ~ 5700 MHz 8.95 mW for 5745 ~ 5825 MHz
Antenna Type	PCB antenna with -2.62 dBi gain (5180 ~ 5240 MHz) PCB antenna with -2.62 dBi gain (5260 ~ 5320 MHz) PCB antenna with -2.21 dBi gain (5500 ~ 5700 MHz) PCB antenna with -1.93 dBi gain (5745 ~ 5825 MHz)
Antenna Connector	N/A
Accessory Device	Refer to Note as below
Data Cable Supplied	N/A

Note:

1. The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers.

Modulation Mode	Tx Function
802.11a	1TX, 2TX
802.11n (HT20)	1TX, 2TX
802.11n (HT40)	1TX, 2TX

2. The EUT contains following accessory devices.

Product	Brand	Model	Description
Adapter	FSP	FSP040-RHAN2	I/P: 100-240 Vac, 50-60 Hz, 1.5 A O/P: 12 Vdc, 3.33 A
Battery	SimPad Plus Battery LAERDAL	204-35050	3.8 Vdc, 4200 mAh

3. The above EUT information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications or user's manual.

3.2 Description of Test Modes

FOR 5180 ~ 5240 MHz

4 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
36	5180	44	5220
40	5200	48	5240

2 channels are provided for 802.11n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
38	5190	46	5230

FOR 5260 ~ 5320 MHz

4 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
52	5260	60	5300
56	5280	64	5320

2 channels are provided for 802.11n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
54	5270	62	5310

FOR 5500 ~ 5700 MHz

11 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
100	5500	124	5620
104	5520	128	5640
108	5540	132	5660
112	5560	136	5680
116	5580	140	5700
120	5600		

5 channels are provided for 802.11n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
102	5510	126	5630
110	5550	134	5670
118	5590		

FOR 5745 ~ 5825 MHz:

5 channels are provided for 802.11a, 802.11n (HT20):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
149	5745	161	5805
153	5765	165	5825
157	5785		

2 channels are provided for 802.11n (HT40):

Channel	Frequency (MHz)	Channel	Frequency (MHz)
151	5755	159	5795

3.2.1 Test Mode Applicability and Tested Channel Detail

EUT Configure Mode	Applicable To				Description
	RE≥1G	RE<1G	PLC	APCM	
A	√	√	√	√	SISO
B	√	√	-	√	MIMO

Where **RE≥1G:** Radiated Emission above 1 GHz **RE<1G:** Radiated Emission below 1 GHz
PLC: Power Line Conducted Emission **APCM:** Antenna Port Conducted Measurement

NOTE:
1. The EUT had been pre-tested on the positioned of each 3 axis. The worst case was found when positioned on **X-plane** for Mode A and Mode B (5500 ~ 5825 MHz), **Z-plane** for Mode B (5180 ~ 5320 MHz).
2. "-" means no effect.

Radiated Emission Test (Above 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, B	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
	802.11n (HT20)		36 to 48	36, 44, 48	OFDM	BPSK	MCS0
	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	MCS0
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	MCS0

Radiated Emission Test (Below 1 GHz):

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	802.11n (HT40)	5180-5240	38 to 46	38	OFDM	BPSK	MCS0
	802.11a	5260-5320	52 to 64	60	OFDM	BPSK	6.0
	802.11n (HT40)	5500-5700	102 to 134	102	OFDM	BPSK	MCS0
	802.11n (HT40)	5745-5825	151 to 159	151	OFDM	BPSK	MCS0
B	802.11a	5180-5240	36 to 48	48	OFDM	BPSK	6.0
	802.11a	5260-5320	52 to 64	60	OFDM	BPSK	6.0
	802.11n (HT40)	5500-5700	102 to 134	102	OFDM	BPSK	MCS0
	802.11n (HT20)	5745-5825	149 to 165	149	OFDM	BPSK	MCS0

Power Line Conducted Emission Test:

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A	802.11n (HT40)	5500-5700	102 to 134	102	OFDM	BPSK	MCS0

Antenna Port Conducted Measurement:

☒ This item includes all test value of each mode, but only includes spectrum plot of worst value of each mode.

☒ Pre-Scan has been conducted to determine the worst-case mode from all possible combinations between available modulations, data rates and antenna ports (if EUT with antenna diversity architecture).

☒ Following channel(s) was (were) selected for the final test as listed below.

EUT Configure Mode	Mode	Frequency Band (MHz)	Available Channel	Tested Channel	Modulation Technology	Modulation Type	Data Rate (Mbps)
A, B	802.11a	5180-5240	36 to 48	36, 44, 48	OFDM	BPSK	6.0
	802.11n (HT20)		36 to 48	36, 44, 48	OFDM	BPSK	MCS0
	802.11n (HT40)		38 to 46	38, 46	OFDM	BPSK	MCS0
	802.11a	5260-5320	52 to 64	52, 60, 64	OFDM	BPSK	6.0
	802.11n (HT20)		52 to 64	52, 60, 64	OFDM	BPSK	MCS0
	802.11n (HT40)		54 to 62	54, 62	OFDM	BPSK	MCS0
	802.11a	5500-5700	100 to 140	100, 116, 140	OFDM	BPSK	6.0
	802.11n (HT20)		100 to 140	100, 116, 140	OFDM	BPSK	MCS0
	802.11n (HT40)		102 to 134	102, 110, 134	OFDM	BPSK	MCS0
	802.11a	5745-5825	149 to 165	149, 157, 165	OFDM	BPSK	6.0
	802.11n (HT20)		149 to 165	149, 157, 165	OFDM	BPSK	MCS0
	802.11n (HT40)		151 to 159	151, 159	OFDM	BPSK	MCS0

Test Condition:

Applicable To	Environmental Conditions	Input Power	Tested by
RE≥1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Gavin Wu
RE<1G	25 deg. C, 65 % RH	120 Vac, 60 Hz	Gavin Wu
PLC	25 deg. C, 65 % RH	120 Vac, 60 Hz	Toby Tian
APCM	25 deg. C, 65 % RH	3.8 Vdc	Luke Chen

3.3 Duty Cycle of Test Signal

Mode A (SISO)

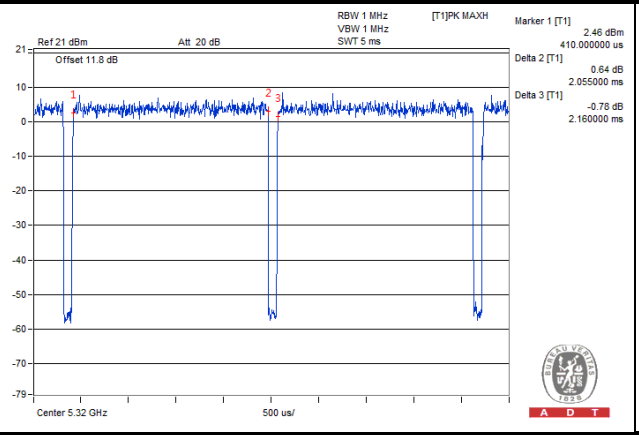
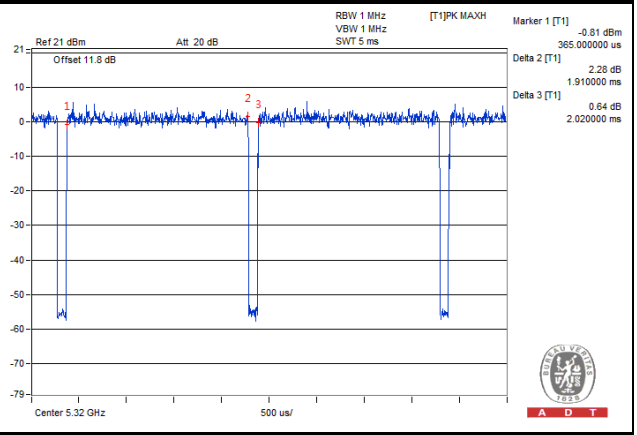
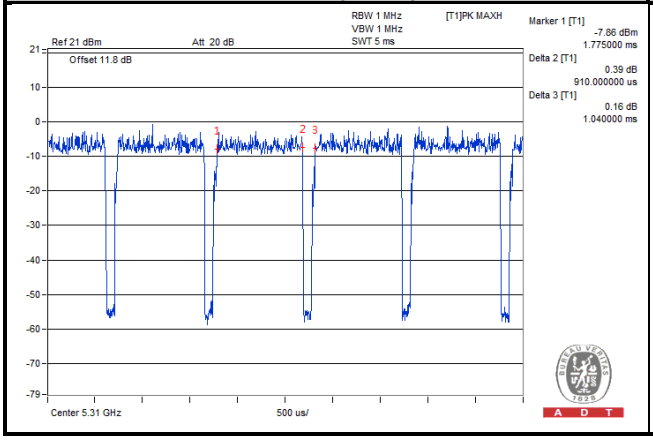
MODULATION TYPE: BPSK

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 2.055/2.160 = 0.951, Duty factor = 10 * log(1/0.951) = 0.22

802.11n (HT20): Duty cycle = 1.910/2.020 = 0.945, Duty factor = 10 * log(1/0.945) = 0.24

802.11n (HT40): Duty cycle = 0.910/1.040 = 0.875, Duty factor = 10 * log(1/0.875) = 0.58

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

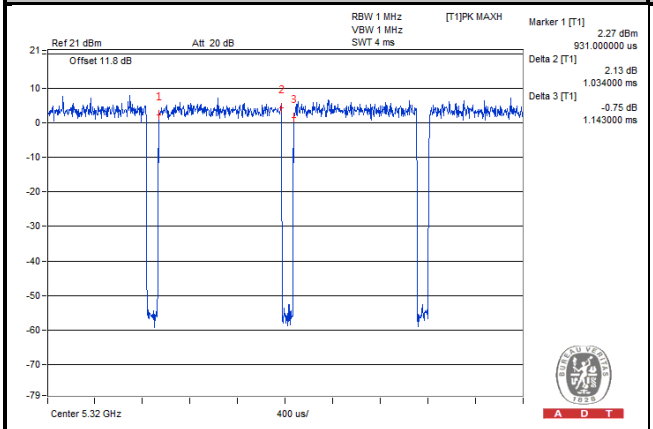
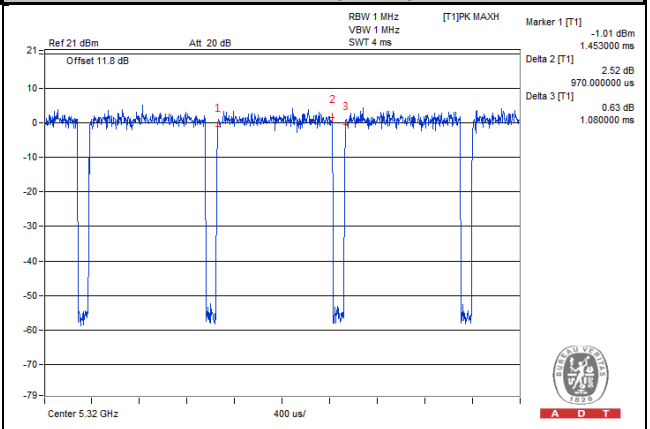
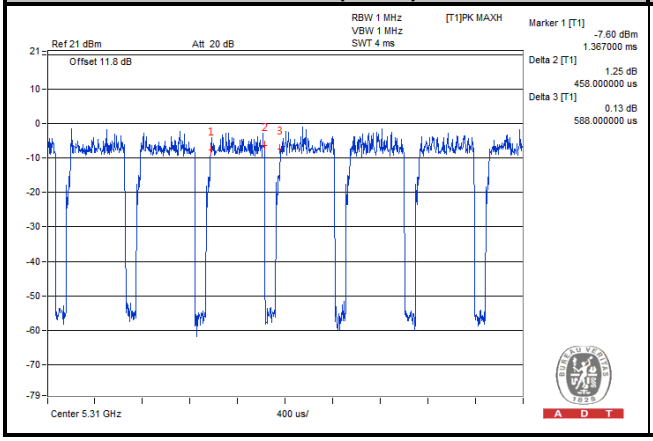
MODULATION TYPE: QPSK

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 1.034/1.143 = 0.904, Duty factor = 10 * log(1/0.904) = 0.44

802.11n (HT20): Duty cycle = 0.970/1.080 = 0.898, Duty factor = 10 * log(1/0.898) = 0.47

802.11n (HT40): Duty cycle = 458/588 = 0.778, Duty factor = 10 * log(1/0.778) = 1.09

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

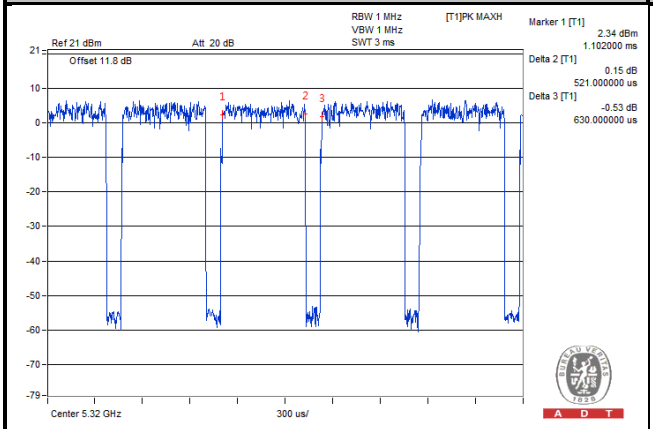
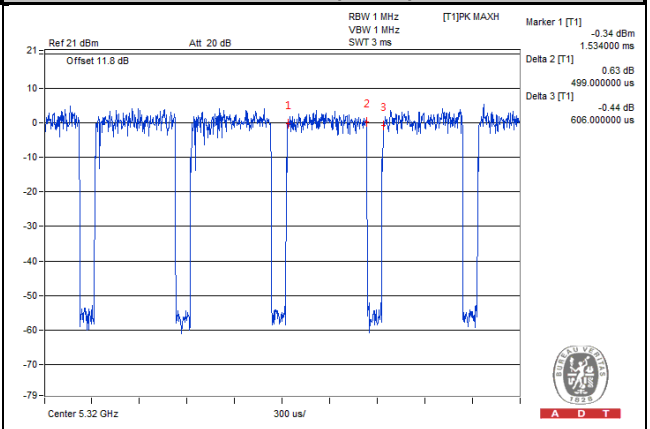
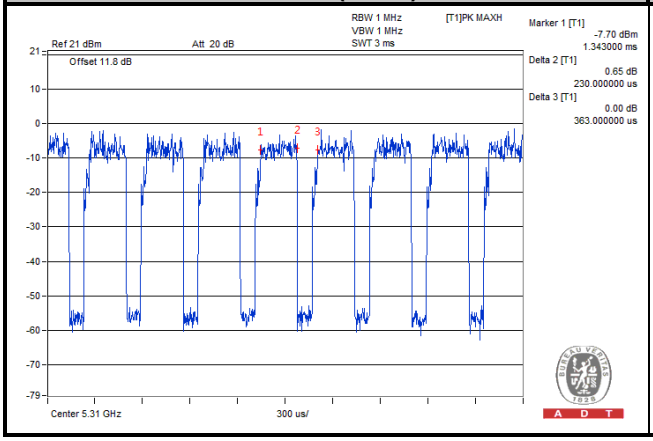
MODULATION TYPE: 16QAM

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 521/630 = 0.827, Duty factor = 10 * log(1/0.827) = 0.82

802.11n (HT20): Duty cycle = 499/606 = 0.823, Duty factor = 10 * log(1/0.823) = 0.84

802.11n (HT40): Duty cycle = 230/363 = 0.633, Duty factor = 10 * log(1/0.633) = 1.98

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

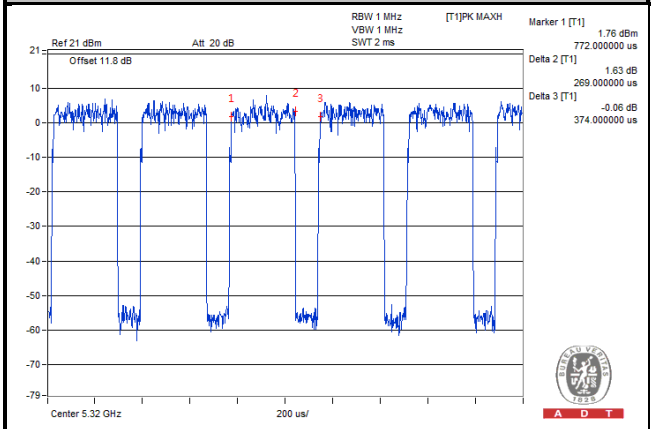
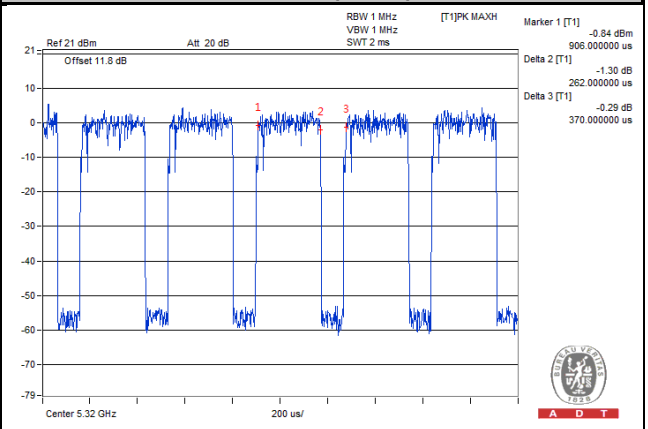
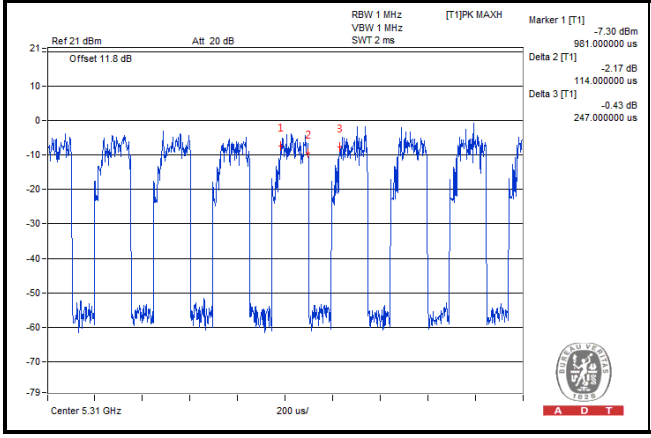
MODULATION TYPE: 64QAM

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 269/374 = 0.719, Duty factor = 10 * log(1/0.719) = 1.43

802.11n (HT20): Duty cycle = 262/370 = 0.708, Duty factor = 10 * log(1/0.708) = 1.50

802.11n (HT40): Duty cycle = 114/247 = 0.461, Duty factor = 10 * log(1/0.461) = 3.36

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

Mode B (MIMO)

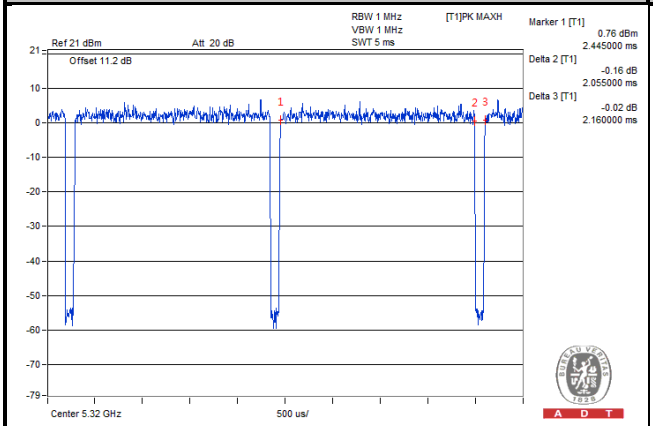
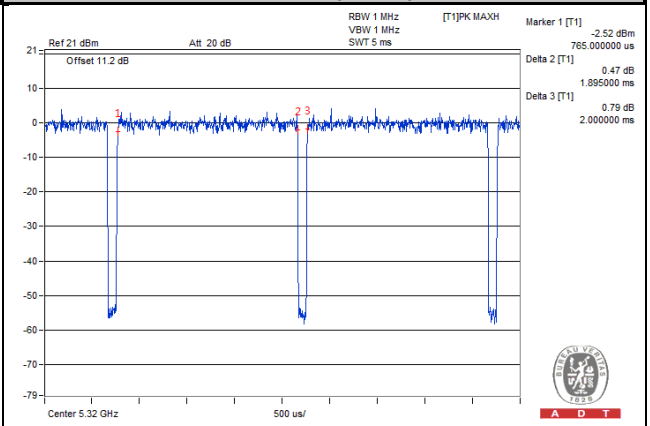
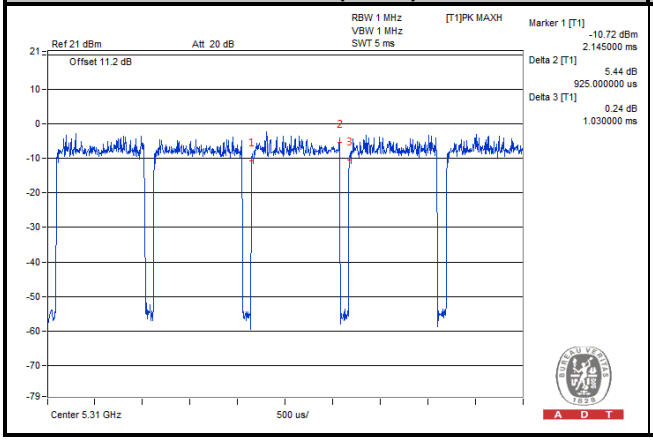
MODULATION TYPE: BPSK

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 2.055/2.160 = 0.951, Duty factor = 10 * log(1/0.951) = 0.22

802.11n (HT20): Duty cycle = 1.895/2.000 = 0.947, Duty factor = 10 * log(1/0.947) = 0.23

802.11n (HT40): Duty cycle = 0.925/1.030 = 0.898, Duty factor = 10 * log(1/0.898) = 0.47

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

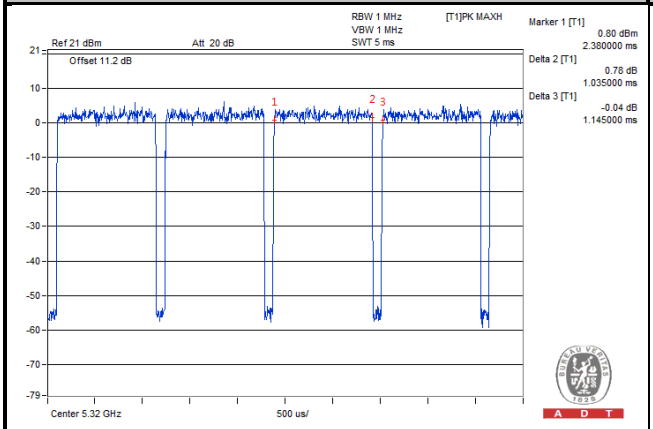
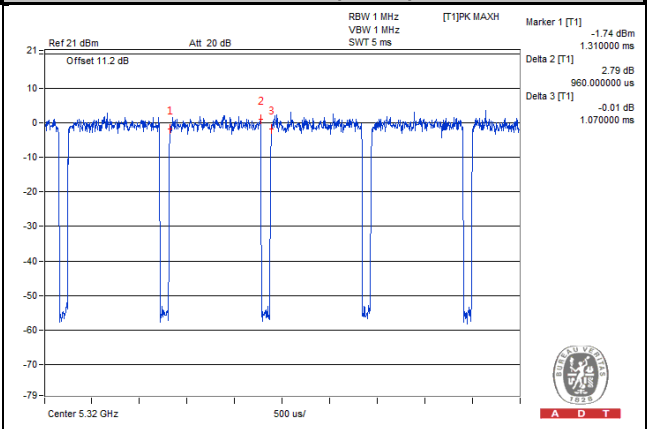
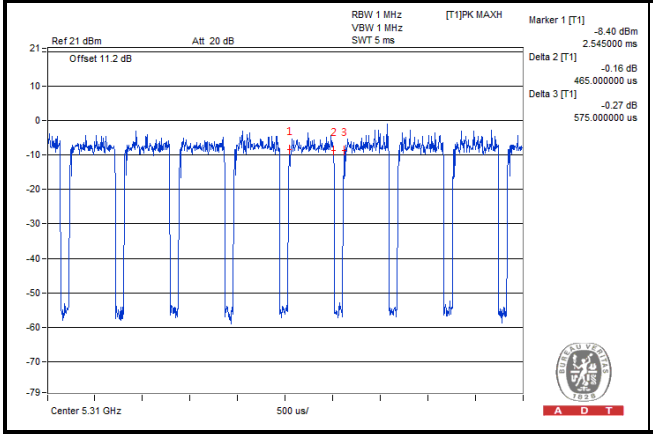
MODULATION TYPE: QPSK

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 1.035/1.145 = 0.903, Duty factor = 10 * log(1/0.903) = 0.44

802.11n (HT20): Duty cycle = 0.960/1.070 = 0.897, Duty factor = 10 * log(1/0.897) = 0.47

802.11n (HT40): Duty cycle = 465/575 = 0.808, Duty factor = 10 * log(1/0.808) = 0.92

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

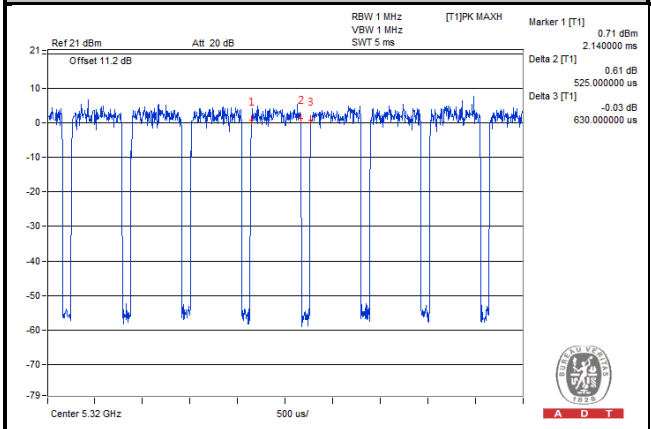
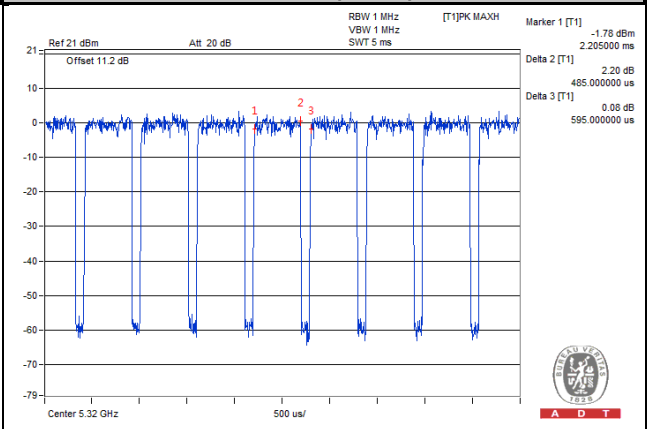
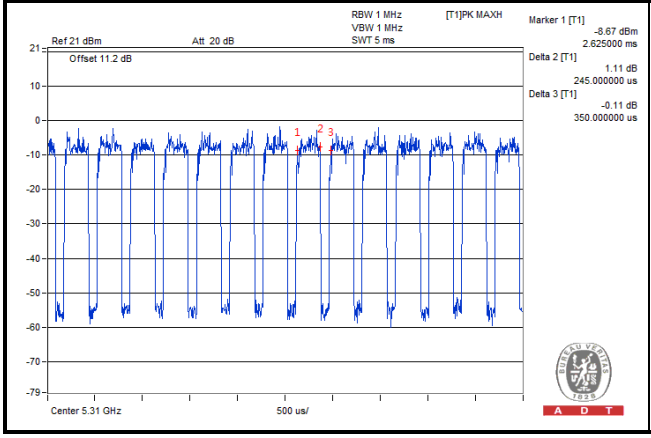
MODULATION TYPE: 16QAM

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 525/630 = 0.833, Duty factor = 10 * log(1/0.833) = 0.79

802.11n (HT20): Duty cycle = 485/595 = 0.815, Duty factor = 10 * log(1/0.815) = 0.89

802.11n (HT40): Duty cycle = 245/350 = 0.700, Duty factor = 10 * log(1/0.700) = 1.55

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

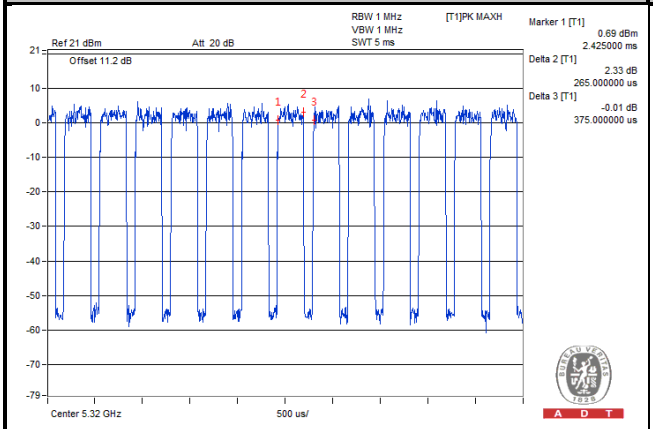
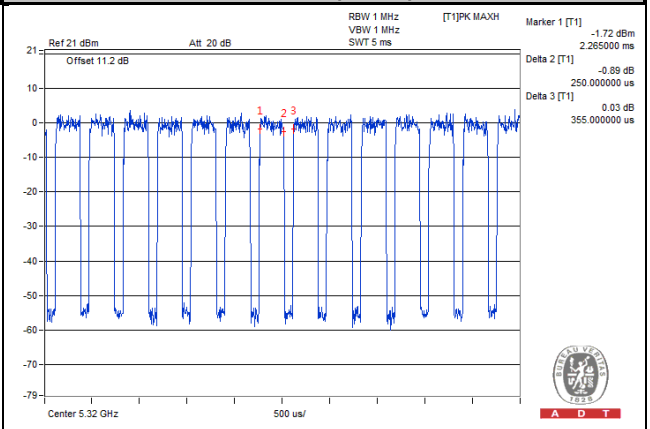
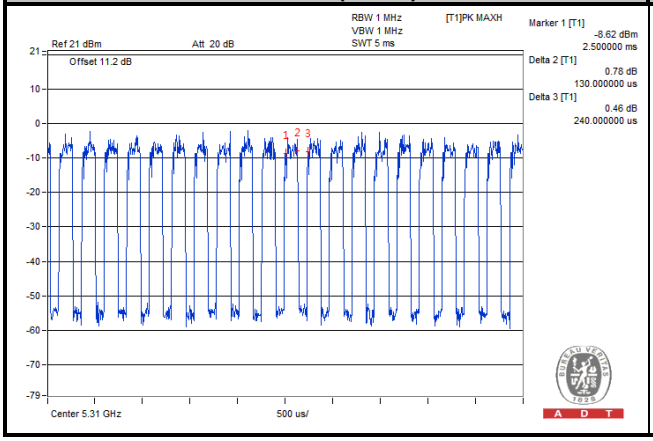
MODULATION TYPE: 64QAM

Duty cycle of test signal is < 98 %, duty factor is required.

802.11a: Duty cycle = 265/375 = 0.706, Duty factor = 10 * log(1/0.706) = 1.51

802.11n (HT20): Duty cycle = 250/355 = 0.704, Duty factor = 10 * log(1/0.704) = 1.52

802.11n (HT40): Duty cycle = 130/240 = 0.511, Duty factor = 10 * log(1/0.511) = 2.91

802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

3.4 Description of Support Units

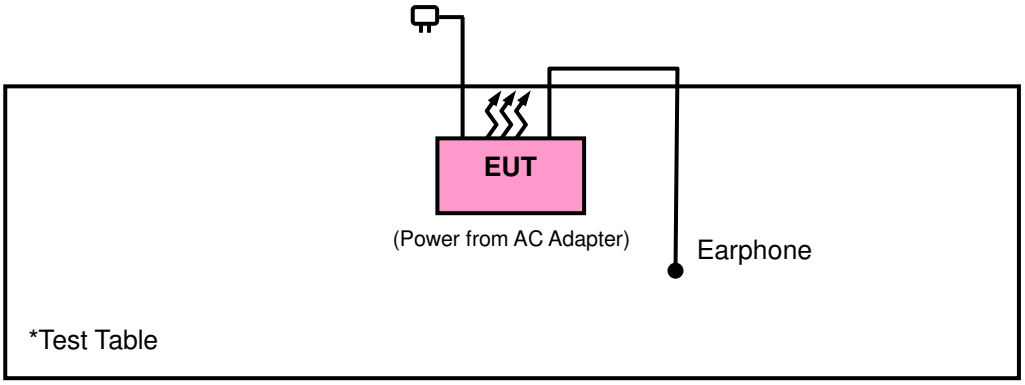
The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

No.	Product	Brand	Model No.	Serial No.	FCC ID
1.	Earphone	N/A	N/A	N/A	N/A

No.	Signal Cable Description Of The Above Support Units
1.	N/A

Note:
1. All power cords of the above support units are non-shielded (1.8m).

3.4.1 Configuration of System under Test



3.5 General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

FCC Part 15, Subpart E (15.407)
789033 D02 General UNII Test Procedures New Rules v01
644545 D01 Guidance for IEEE 802 11ac v01r02
662911 D01 Multiple Transmitter Output v02r01
ANSI C63.10-2013

All test items have been performed and recorded as per the above standards.

4 Test Types and Results

4.1 Radiated Emission and Bandedge Measurement

4.1.1 Limits of Radiated Emission and Bandedge Measurement

Radiated emissions which fall in the restricted bands must comply with the radiated emission limits specified as below table. Other emissions shall be at least 20 dB below the highest level of the desired power:

Frequencies (MHz)	Field Strength (microvolts/meter)	Measurement Distance (meters)
0.009 ~ 0.490	2400/F (kHz)	300
0.490 ~ 1.705	24000/F (kHz)	30
1.705 ~ 30.0	30	30
30 ~ 88	100	3
88 ~ 216	150	3
216 ~ 960	200	3
Above 960	500	3

NOTE:

1. The lower limit shall apply at the transition frequencies.
2. Emission level (dBuV/m) = 20 log Emission level (uV/m).
3. For frequencies above 1000 MHz, the field strength limits are based on average detector, however, the peak field strength of any emission shall not exceed the maximum permitted average limits, specified above by more than 20 dB under any condition of modulation.

4.1.2 Limits of Unwanted Emission Out of the Restricted Bands

Applicable To	Limit	
789033 D02 General UNII Test Procedures New Rules v01	Field Strength at 3 m	
	PK: 74 (dBμV/m)	AV: 54 (dBμV/m)
Applicable To	**EIRP Limit**	**Equivalent Field Strength at 3 m**
15.407(b)(1)	PK: -27 (dBm/MHz)	PK: 68.2 (dBμV/m)
15.407(b)(2)		
15.407(b)(3)		
15.407(b)(4)	PK: -27 (dBm/MHz) [*1] PK: -17 (dBm/MHz) [*2]	PK: 68.2 (dBμV/m) [*1] PK: 78.2 (dBμV/m) [*2]

NOTE: [*1] beyond 10 MHz of the band edge [*2] within 10 MHz of band edge

The following formula is used to convert the equipment isotropic radiated power (eirp) to field strength:

$$E = \frac{1000000\sqrt{30P}}{3}$$ μV/m, where P is the eirp (Watts).

4.1.3 Test Instruments

Description & Manaufacturer	Model No.	Serial No.	Date of Calibration	Due Date of Calibration
Test Receiver Agilent	N9038A	MY51210203	Jan. 21, 2015	Jan. 21, 2016
Spectrum Analyzer Agilent	N9010A	MY52220314	Sep. 03, 2015	Sep. 02, 2016
Spectrum Analyzer ROHDE & SCHWARZ	FSU43	101261	Dec. 17, 2015	Dec. 16, 2016
BILOG Antenna SCHWARZBECK	VULB9168	9168-472	Feb. 04, 2015	Feb. 04, 2016
HORN Antenna SCHWARZBECK	BBHA 9120 D	9120D-969	Feb. 09, 2015	Feb. 09, 2016
HORN Antenna SCHWARZBECK	BBHA 9170	9170-480	Feb. 04, 2015	Feb. 04, 2016
Loop Antenna	EM-6879	269	Jul. 31, 2015	Jul. 30, 2016
Preamplifier Agilent	8447D	2944A10628	Oct. 15, 2015	Oct. 14, 2016
Preamplifier EMCI	EMC 184045	980116	Jan. 09, 2015	Jan. 08, 2016
Preamplifier EMCI	EMC 330H	980112	Dec. 27, 2014	Dec. 26, 2015
Power Meter Anritsu	ML2495A	1232002	Sep. 21, 2015	Sep. 20, 2016
Power Sensor Anritsu	MA2411B	1207325	Sep. 21, 2015	Sep. 20, 2016
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	309219/4 2950114	Oct. 12, 2015	Oct. 11, 2016
RF signal cable HUBER+SUHNNER	SUCOFLEX 104	250130/4	Oct. 12, 2015	Oct. 11, 2016
RF Coaxial Cable Worken	8D-FB	Cable-Ch10-01	Oct. 12, 2015	Oct. 11, 2016
Software BV ADT	E3 6.120103	NA	NA	NA
Antenna Tower MF	MFA-440H	NA	NA	NA
Turn Table MF	MFT-201SS	NA	NA	NA
Antenna Tower &Turn Table Controller MF	MF-7802	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Chamber 10.
3. The horn antenna and preamplifier (model: EMC 184045) are used only for the measurement of emission frequency above 1 GHz if tested.
4. The FCC Site Registration No. is 690701.
5. The IC Site Registration No. is IC7450F-10.

4.1.4 Test Procedures

a. The EUT was placed on the top of a rotating table 0.8 meters (for below 1 GHz) / 1.5 meters (for above 1 GHz) above the ground at 3 meter chamber room for test. The table was rotated 360 degrees to determine the position of the highest radiation.
b. The EUT was set 3 meters away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
c. The height of antenna is varied from one meter to four meters above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 meter to 4 meters and the rotatable table was turned from 0 degrees to 360 degrees to find the maximum reading.
e. The test-receiver system was set to quasi-peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1 GHz.
f. The test-receiver system was set to peak and average detected function and specified bandwidth with maximum hold mode when the test frequency is above 1 GHz. If the peak reading value also meets average limit, measurement with the average detector is unnecessary.

Note:

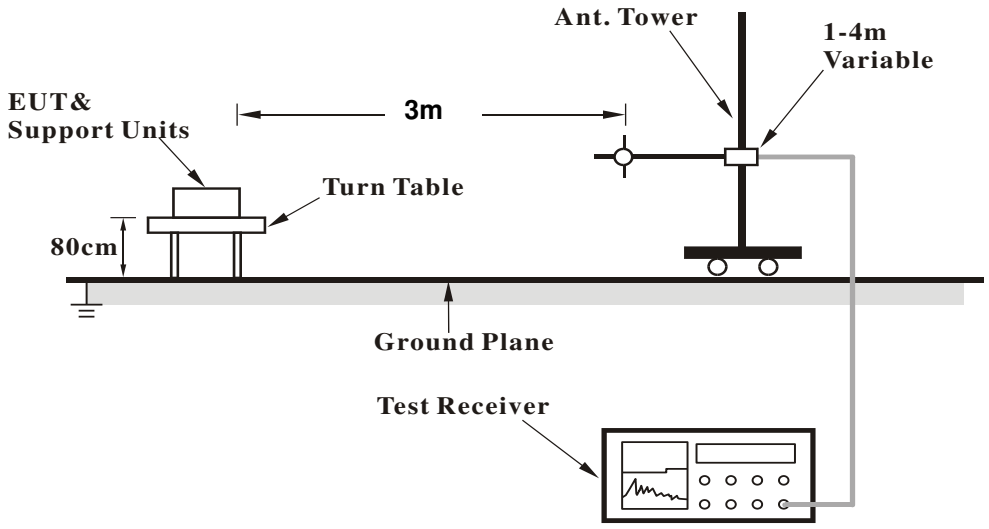
1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120 kHz for Quasi-peak detection (QP) at frequency below 1 GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for Peak detection (PK) at frequency above 1 GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 3 MHz for RMS Average (Duty cycle < 98 %) for Average detection (AV) at frequency above 1 GHz, then the measurement results was added to a correction factor (10 log(1/duty cycle)).
4. The resolution bandwidth of test receiver/spectrum analyzer is 1 MHz and the video bandwidth is 10 Hz (Duty cycle ≥ 98 %) for Average detection (AV) at frequency above 1 GHz.
5. All modes of operation were investigated and the worst-case emissions are reported.

4.1.5 Deviation from Test Standard

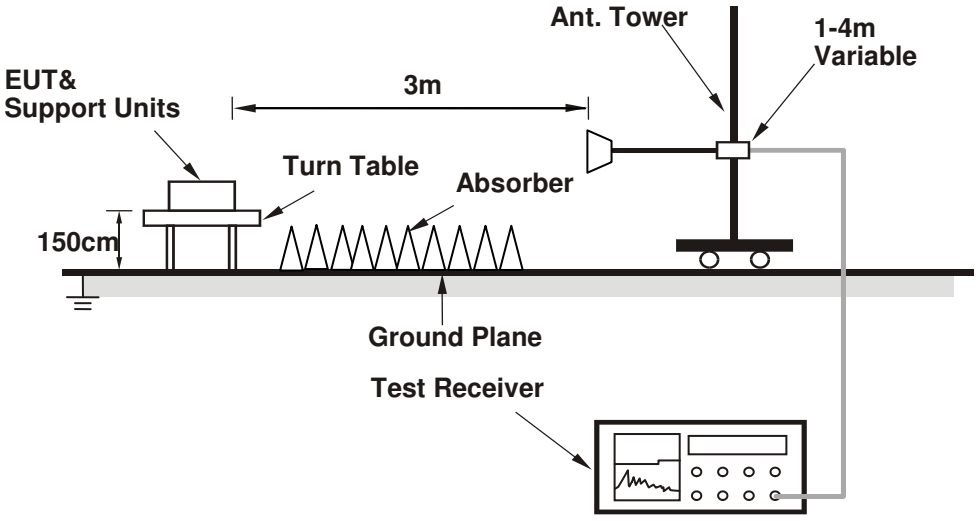
No deviation.

4.1.6 Test Set Up

<Frequency Range below 1 GHz>



<Frequency Range above 1 GHz>



For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.1.7 EUT Operating Conditions

a. Placed the EUT on a testing table.
b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

4.1.8 Test Results

Mode A (SISO)

ABOVE 1 GHz DATA :

802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 36	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5148	49.92	49.72	54	-4.08	31.32	6.2	37.32	202	221	Average
5148	67.34	67.14	74	-6.66	31.32	6.2	37.32	202	221	Peak
5180	96.65	96.42			31.35	6.22	37.34	202	221	Average
5180	105.81	105.58			31.35	6.22	37.34	202	221	Peak
5418	39.74	39.07	54	-14.26	31.53	6.32	37.18	202	221	Average
5418	60.34	59.67	74	-13.66	31.53	6.32	37.18	202	221	Peak
15540	50.81	51.53	54	-3.19	38.1	12.53	51.35	100	171	Average
15540	60.65	61.37	74	-13.35	38.1	12.53	51.35	100	171	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5018	42.91	42.79	54	-11.09	31.21	6.15	37.24	100	58	Average
5018	60.3	60.18	74	-13.7	31.21	6.15	37.24	100	58	Peak
5180	89.02	88.79			31.35	6.22	37.34	100	58	Average
5180	98.63	98.4			31.35	6.22	37.34	100	58	Peak
5356	38.19	37.6	54	-15.81	31.48	6.29	37.18	100	58	Average
5356	60.36	59.77	74	-13.64	31.48	6.29	37.18	100	58	Peak
15540	48.08	48.8	54	-5.92	38.1	12.53	51.35	100	141	Average
15540	60.67	61.39	74	-13.33	38.1	12.53	51.35	100	141	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 44	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5074	47.51	47.34	54	-6.49	31.27	6.17	37.27	209	217	Average
5074	61.18	61.01	74	-12.82	31.27	6.17	37.27	209	217	Peak
5220	97.09	96.84			31.37	6.24	37.36	209	217	Average
5220	105.73	105.48			31.37	6.24	37.36	209	217	Peak
5364	44.16	43.54	54	-9.84	31.49	6.31	37.18	209	217	Average
5364	60.32	59.7	74	-13.68	31.49	6.31	37.18	209	217	Peak
15660	50.06	52.92	54	-3.94	37.77	12.52	53.15	161	167	Average
15660	57.77	60.63	74	-16.23	37.77	12.52	53.15	161	167	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5102	38.42	38.23	54	-15.58	31.28	6.19	37.28	107	52	Average
5102	60.27	60.08	74	-13.73	31.28	6.19	37.28	107	52	Peak
5220	89.4	89.15			31.37	6.24	37.36	107	52	Average
5220	98.53	98.28			31.37	6.24	37.36	107	52	Peak
5360	38.24	37.63	54	-15.76	31.48	6.31	37.18	107	52	Average
5360	60.02	59.41	74	-13.98	31.48	6.31	37.18	107	52	Peak
15660	45.76	48.62	54	-8.24	37.77	12.52	53.15	100	89	Average
15660	57.23	60.09	74	-16.77	37.77	12.52	53.15	100	89	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 48	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5094	47.42	47.23	54	-6.58	31.28	6.19	37.28	176	217	Average
5094	60.67	60.48	74	-13.33	31.28	6.19	37.28	176	217	Peak
5240	96.76	96.44			31.39	6.25	37.32	176	217	Average
5240	105.85	105.53			31.39	6.25	37.32	176	217	Peak
5388	45.06	44.42	54	-8.94	31.51	6.31	37.18	176	217	Average
5388	60.33	59.69	74	-13.67	31.51	6.31	37.18	176	217	Peak
15720	49.62	52.5	54	-4.38	37.57	12.52	52.97	134	171	Average
15720	58.54	61.42	74	-15.46	37.57	12.52	52.97	134	171	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5138	38.2	37.99	54	-15.8	31.31	6.2	37.3	106	52	Average
5138	59.82	59.61	74	-14.18	31.31	6.2	37.3	106	52	Peak
5240	89.59	89.27			31.39	6.25	37.32	106	52	Average
5240	98.89	98.57			31.39	6.25	37.32	106	52	Peak
5374	38.27	37.65	54	-15.73	31.49	6.31	37.18	106	52	Average
5374	59.53	58.91	74	-14.47	31.49	6.31	37.18	106	52	Peak
15720	49.27	52.15	54	-4.73	37.57	12.52	52.97	165	224	Average
15720	59.74	62.62	74	-14.26	37.57	12.52	52.97	165	224	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 52	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5110	46.94	46.74	54	-7.06	31.29	6.19	37.28	186	218	Average
5110	61.59	61.39	74	-12.41	31.29	6.19	37.28	186	218	Peak
5260	97.05	96.66			31.41	6.25	37.27	186	218	Average
5260	106.11	105.72			31.41	6.25	37.27	186	218	Peak
5456	44.27	43.45	54	-9.73	31.56	6.34	37.08	186	218	Average
5456	61.58	60.76	74	-12.42	31.56	6.34	37.08	186	218	Peak
15780	52.53	53.99	54	-1.47	37.43	12.5	51.39	165	171	Average
15780	63.79	65.25	74	-10.21	37.43	12.5	51.39	165	171	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5062	38.44	38.27	54	-15.56	31.25	6.17	37.25	124	62	Average
5062	60.28	60.11	74	-13.72	31.25	6.17	37.25	124	62	Peak
5260	90.37	89.98			31.41	6.25	37.27	124	62	Average
5260	99.62	99.23			31.41	6.25	37.27	124	62	Peak
5374	38.37	37.75	54	-15.63	31.49	6.31	37.18	124	62	Average
5374	61.35	60.73	74	-12.65	31.49	6.31	37.18	124	62	Peak
15780	50.43	51.89	54	-3.57	37.43	12.5	51.39	109	224	Average
15780	60.96	62.42	74	-13.04	37.43	12.5	51.39	109	224	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 60	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5002	45.91	45.81	54	-8.09	31.2	6.13	37.23	151	226	Average
5002	61.02	60.92	74	-12.98	31.2	6.13	37.23	151	226	Peak
5300	96.64	96.12			31.44	6.27	37.19	151	226	Average
5300	105.46	104.94			31.44	6.27	37.19	151	226	Peak
5350	43.01	42.42	54	-10.99	31.48	6.29	37.18	151	226	Average
5350	62.29	61.7	74	-11.71	31.48	6.29	37.18	151	226	Peak
15900	**52.74**	**54.17**	**54**	**-1.26**	**37.09**	**12.49**	**51.01**	**143**	**168**	**Average**
15900	62.94	64.37	74	-11.06	37.09	12.49	51.01	143	168	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5138	41.03	40.82	54	-12.97	31.31	6.2	37.3	116	64	Average
5138	61.07	60.86	74	-12.93	31.31	6.2	37.3	116	64	Peak
5300	90.22	89.7			31.44	6.27	37.19	116	64	Average
5300	99.61	99.09			31.44	6.27	37.19	116	64	Peak
5456	39.26	38.44	54	-14.74	31.56	6.34	37.08	116	64	Average
5456	60.52	59.7	74	-13.48	31.56	6.34	37.08	116	64	Peak
15900	48.86	50.29	54	-5.14	37.09	12.49	51.01	110	113	Average
15900	60.26	61.69	74	-13.74	37.09	12.49	51.01	110	113	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 64	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5016	45.38	45.25	54	-8.62	31.21	6.15	37.23	183	229	Average
5016	61.38	61.25	74	-12.62	31.21	6.15	37.23	183	229	Peak
5320	96.62	96.07			31.45	6.29	37.19	183	229	Average
5320	105.63	105.08			31.45	6.29	37.19	183	229	Peak
5350	51.73	51.14	54	-2.27	31.48	6.29	37.18	183	229	Average
5350	69.82	69.23	74	-4.18	31.48	6.29	37.18	183	229	Peak
15960	51.44	54.61	54	-2.56	36.9	12.49	52.56	143	168	Average
15960	63.08	66.25	74	-10.92	36.9	12.49	52.56	143	168	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5110	40.51	40.31	54	-13.49	31.29	6.19	37.28	101	59	Average
5110	60.25	60.05	74	-13.75	31.29	6.19	37.28	101	59	Peak
5320	90.03	89.48			31.45	6.29	37.19	101	59	Average
5320	99.26	98.71			31.45	6.29	37.19	101	59	Peak
5350	46.02	45.43	54	-7.98	31.48	6.29	37.18	101	59	Average
5350	64.9	64.31	74	-9.1	31.48	6.29	37.18	101	59	Peak
15960	48.4	51.57	54	-5.6	36.9	12.49	52.56	107	219	Average
15960	60.32	63.49	74	-13.68	36.9	12.49	52.56	107	219	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 100	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5460	46	45.18	54	-8	31.56	6.34	37.08	183	38	Average
5460	64.5	63.68	74	-9.5	31.56	6.34	37.08	183	38	Peak
*5470	66.27	65.44	68.2	-1.93	31.57	6.34	37.08	183	38	Peak
5500	94.78	93.85			31.6	6.36	37.03	183	38	Average
5500	104.31	103.38			31.6	6.36	37.03	183	38	Peak
*5725	60.4	59.12	68.2	-7.8	31.96	6.75	37.43	183	38	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5406	42.79	42.13	54	-11.21	31.52	6.32	37.18	100	264	Average
5406	60.78	60.12	74	-13.22	31.52	6.32	37.18	100	264	Peak
*5470	62.46	61.63	68.2	-5.74	31.57	6.34	37.08	100	264	Peak
5500	89.36	88.43			31.6	6.36	37.03	100	264	Average
5500	99.55	98.62			31.6	6.36	37.03	100	264	Peak
*5725	62.65	61.37	68.2	-5.55	31.96	6.75	37.43	100	264	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 116	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5424	40.09	39.42	54	-13.91	31.53	6.32	37.18	169	48	Average
5424	59.89	59.22	74	-14.11	31.53	6.32	37.18	169	48	Peak
*5470	59.14	58.31	68.2	-9.06	31.57	6.34	37.08	169	48	Peak
5580	94.67	93.63			31.71	6.49	37.16	169	48	Average
5580	104.45	103.41			31.71	6.49	37.16	169	48	Peak
*5725	61.84	60.56	68.2	-6.36	31.96	6.75	37.43	169	48	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5394	38.53	37.89	54	-15.47	31.51	6.31	37.18	102	70	Average
5394	60.71	60.07	74	-13.29	31.51	6.31	37.18	102	70	Peak
*5470	57.46	56.63	68.2	-10.74	31.57	6.34	37.08	102	70	Peak
5580	89.89	88.85			31.71	6.49	37.16	102	70	Average
5580	99.38	98.34			31.71	6.49	37.16	102	70	Peak
*5725	59.34	58.06	68.2	-8.86	31.96	6.75	37.43	102	70	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 140	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5360	41.87	41.26	54	-12.13	31.48	6.31	37.18	200	44	Average
5360	61.56	60.95	74	-12.44	31.48	6.31	37.18	200	44	Peak
*5470	58.52	57.69	68.2	-9.68	31.57	6.34	37.08	200	44	Peak
5700	96.1	94.91			31.9	6.69	37.4	200	44	Average
5700	105.67	104.48			31.9	6.69	37.4	200	44	Peak
*5725	66.65	65.37	68.2	-1.55	31.96	6.75	37.43	200	44	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5354	39.32	38.73	54	-14.68	31.48	6.29	37.18	146	78	Average
5354	60.38	59.79	74	-13.62	31.48	6.29	37.18	146	78	Peak
*5470	57.63	56.8	68.2	-10.57	31.57	6.34	37.08	146	78	Peak
5700	91.23	90.04			31.9	6.69	37.4	146	78	Average
5700	100.73	99.54			31.9	6.69	37.4	146	78	Peak
*5725	62.5	61.22	68.2	-5.7	31.96	6.75	37.43	146	78	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 149	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.01	58.82	68.2	-8.19	31.93	6.69	37.43	172	47	Peak
*5725	64.28	63	78.2	-13.92	31.96	6.75	37.43	172	47	Peak
5745	92.14	90.87			31.99	6.75	37.47	172	47	Average
5745	102.02	100.75			31.99	6.75	37.47	172	47	Peak
*5850	60.08	58.56	78.2	-18.12	32.15	6.88	37.51	172	47	Peak
*5861	60.95	59.32	68.2	-7.25	32.18	6.95	37.5	172	47	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.93	59.74	68.2	-7.27	31.93	6.69	37.43	101	287	Peak
*5725	59.92	58.64	78.2	-18.28	31.96	6.75	37.43	101	287	Peak
5745	87.04	85.77			31.99	6.75	37.47	101	287	Average
5745	96.34	95.07			31.99	6.75	37.47	101	287	Peak
*5850	60.8	59.28	78.2	-17.4	32.15	6.88	37.51	101	287	Peak
*5861	59.26	57.63	68.2	-8.94	32.18	6.95	37.5	101	287	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 157	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	58.8	57.61	68.2	-9.4	31.93	6.69	37.43	188	50	Peak
*5725	61.4	60.12	78.2	-16.8	31.96	6.75	37.43	188	50	Peak
5785	92.68	91.36			32.04	6.82	37.54	188	50	Average
5785	102.06	100.74			32.04	6.82	37.54	188	50	Peak
*5850	60.21	58.69	78.2	-17.99	32.15	6.88	37.51	188	50	Peak
*5861	60.34	58.71	68.2	-7.86	32.18	6.95	37.5	188	50	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.87	58.68	68.2	-8.33	31.93	6.69	37.43	101	292	Peak
*5725	59.12	57.84	78.2	-19.08	31.96	6.75	37.43	101	292	Peak
5785	87.01	85.69			32.04	6.82	37.54	101	292	Average
5785	96.15	94.83			32.04	6.82	37.54	101	292	Peak
*5850	59.94	58.42	78.2	-18.26	32.15	6.88	37.51	101	292	Peak
*5861	60.62	58.99	68.2	-7.58	32.18	6.95	37.5	101	292	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 165	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.46	58.27	68.2	-8.74	31.93	6.69	37.43	184	53	Peak
*5725	60.43	59.15	78.2	-17.77	31.96	6.75	37.43	184	53	Peak
5825	94.3	92.83			32.12	6.88	37.53	184	53	Average
5825	103.84	102.37			32.12	6.88	37.53	184	53	Peak
*5850	65.25	63.73	78.2	-12.95	32.15	6.88	37.51	184	53	Peak
*5861	61.74	60.11	68.2	-6.46	32.18	6.95	37.5	184	53	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.62	58.43	68.2	-8.58	31.93	6.69	37.43	100	251	Peak
*5725	58.72	57.44	78.2	-19.48	31.96	6.75	37.43	100	251	Peak
5825	88.5	87.03			32.12	6.88	37.53	100	251	Average
5825	97.73	96.26			32.12	6.88	37.53	100	251	Peak
*5850	61	59.48	78.2	-17.2	32.15	6.88	37.51	100	251	Peak
*5861	61.49	59.86	68.2	-6.71	32.18	6.95	37.5	100	251	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5825 MHz: Fundamental frequency.
3. *: Out of restricted band

802.11n (HT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 36	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5028	47.32	47.18	54	-6.68	31.23	6.15	37.24	195	221	Average
5028	61.8	61.66	74	-12.2	31.23	6.15	37.24	195	221	Peak
5180	94.71	94.48			31.35	6.22	37.34	195	221	Average
5180	104.09	103.86			31.35	6.22	37.34	195	221	Peak
5404	39.39	38.73	54	-14.61	31.52	6.32	37.18	195	221	Average
5404	60.31	59.65	74	-13.69	31.52	6.32	37.18	195	221	Peak
15540	48.07	48.79	54	-5.93	38.1	12.53	51.35	173	173	Average
15540	59.08	59.8	74	-14.92	38.1	12.53	51.35	173	173	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5148	40.95	40.75	54	-13.05	31.32	6.2	37.32	107	60	Average
5148	59.92	59.72	74	-14.08	31.32	6.2	37.32	107	60	Peak
5180	87.32	87.09			31.35	6.22	37.34	107	60	Average
5180	96.59	96.36			31.35	6.22	37.34	107	60	Peak
5396	38.3	37.65	54	-15.7	31.52	6.31	37.18	107	60	Average
5396	61.24	60.59	74	-12.76	31.52	6.31	37.18	107	60	Peak
15540	47.5	48.22	54	-6.5	38.1	12.53	51.35	173	291	Average
15540	59.34	60.06	74	-14.66	38.1	12.53	51.35	173	291	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 44	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5132	46.52	46.31	54	-7.48	31.31	6.2	37.3	194	220	Average
5132	61.58	61.37	74	-12.42	31.31	6.2	37.3	194	220	Peak
5220	95.17	94.92			31.37	6.24	37.36	194	220	Average
5220	104.01	103.76			31.37	6.24	37.36	194	220	Peak
5366	43.41	42.79	54	-10.59	31.49	6.31	37.18	194	220	Average
5366	61.16	60.54	74	-12.84	31.49	6.31	37.18	194	220	Peak
15660	48.15	51.01	54	-5.85	37.77	12.52	53.15	173	167	Average
15660	59.18	62.04	74	-14.82	37.77	12.52	53.15	173	167	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5138	38.46	38.25	54	-15.54	31.31	6.2	37.3	106	58	Average
5138	60.97	60.76	74	-13.03	31.31	6.2	37.3	106	58	Peak
5220	87.47	87.22			31.37	6.24	37.36	106	58	Average
5220	98.1	97.85			31.37	6.24	37.36	106	58	Peak
5450	38.22	37.4	54	-15.78	31.56	6.34	37.08	106	58	Average
5450	60.16	59.34	74	-13.84	31.56	6.34	37.08	106	58	Peak
15660	47.41	50.27	54	-6.59	37.77	12.52	53.15	165	180	Average
15660	59.32	62.18	74	-14.68	37.77	12.52	53.15	165	180	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 48	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5088	47.25	47.06	54	-6.75	31.27	6.19	37.27	182	220	Average
5088	60.83	60.64	74	-13.17	31.27	6.19	37.27	182	220	Peak
5240	95.11	94.79			31.39	6.25	37.32	182	220	Average
5240	104.76	104.44			31.39	6.25	37.32	182	220	Peak
5432	43.67	42.93	54	-10.33	31.55	6.32	37.13	182	220	Average
5432	60.47	59.73	74	-13.53	31.55	6.32	37.13	182	220	Peak
15720	48.7	51.58	54	-5.3	37.57	12.52	52.97	178	162	Average
15720	60.09	62.97	74	-13.91	37.57	12.52	52.97	178	162	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5062	39.14	38.97	54	-14.86	31.25	6.17	37.25	100	64	Average
5062	61.26	61.09	74	-12.74	31.25	6.17	37.25	100	64	Peak
5240	86.91	86.59			31.39	6.25	37.32	100	64	Average
5240	96.52	96.2			31.39	6.25	37.32	100	64	Peak
5400	38.27	37.61	54	-15.73	31.52	6.32	37.18	100	64	Average
5400	61.23	60.57	74	-12.77	31.52	6.32	37.18	100	64	Peak
15720	47.44	50.32	54	-6.56	37.57	12.52	52.97	152	189	Average
15720	59.47	62.35	74	-14.53	37.57	12.52	52.97	152	189	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 52	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5114	45.45	45.25	54	-8.55	31.29	6.19	37.28	194	215	Average
5114	61.61	61.41	74	-12.39	31.29	6.19	37.28	194	215	Peak
5260	94.2	93.81			31.41	6.25	37.27	194	215	Average
5260	103.33	102.94			31.41	6.25	37.27	194	215	Peak
5452	42.18	41.36	54	-11.82	31.56	6.34	37.08	194	215	Average
5452	61.32	60.5	74	-12.68	31.56	6.34	37.08	194	215	Peak
15780	50.55	52.01	54	-3.45	37.43	12.5	51.39	163	168	Average
15780	62	63.46	74	-12	37.43	12.5	51.39	163	168	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5084	38.33	38.16	54	-15.67	31.27	6.17	37.27	124	63	Average
5084	61.29	61.12	74	-12.71	31.27	6.17	37.27	124	63	Peak
5260	87.22	86.83			31.41	6.25	37.27	124	63	Average
5260	97.32	96.93			31.41	6.25	37.27	124	63	Peak
5458	38.38	37.56	54	-15.62	31.56	6.34	37.08	124	63	Average
5458	61.26	60.44	74	-12.74	31.56	6.34	37.08	124	63	Peak
15780	49.45	50.91	54	-4.55	37.43	12.5	51.39	182	189	Average
15780	59.78	61.24	74	-14.22	37.43	12.5	51.39	182	189	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 60	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5142	45.94	45.72	54	-8.06	31.32	6.2	37.3	174	226	Average
5142	61.69	61.47	74	-12.31	31.32	6.2	37.3	174	226	Peak
5300	93.75	93.23			31.44	6.27	37.19	174	226	Average
5300	103.84	103.32			31.44	6.27	37.19	174	226	Peak
5452	41.52	40.7	54	-12.48	31.56	6.34	37.08	174	226	Average
5452	61.11	60.29	74	-12.89	31.56	6.34	37.08	174	226	Peak
15900	50.02	51.45	54	-3.98	37.09	12.49	51.01	172	152	Average
15900	60.96	62.39	74	-13.04	37.09	12.49	51.01	172	152	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5086	40.62	40.45	54	-13.38	31.27	6.17	37.27	101	70	Average
5086	60.17	60	74	-13.83	31.27	6.17	37.27	101	70	Peak
5300	87	86.48			31.44	6.27	37.19	101	70	Average
5300	96.87	96.35			31.44	6.27	37.19	101	70	Peak
5394	38.65	38.01	54	-15.35	31.51	6.31	37.18	101	70	Average
5394	60.56	59.92	74	-13.44	31.51	6.31	37.18	101	70	Peak
15900	49.5	50.93	54	-4.5	37.09	12.49	51.01	178	197	Average
15900	59.81	61.24	74	-14.19	37.09	12.49	51.01	178	197	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 64	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5138	45.15	44.94	54	-8.85	31.31	6.2	37.3	144	228	Average
5138	62.22	62.01	74	-11.78	31.31	6.2	37.3	144	228	Peak
5320	93.46	92.91			31.45	6.29	37.19	144	228	Average
5320	102.43	101.88			31.45	6.29	37.19	144	228	Peak
5350	45.64	45.05	54	-8.36	31.48	6.29	37.18	144	228	Average
5350	66.85	66.26	74	-7.15	31.48	6.29	37.18	144	228	Peak
15960	50.17	53.34	54	-3.83	36.9	12.49	52.56	162	181	Average
15960	61.44	64.61	74	-12.56	36.9	12.49	52.56	162	181	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5124	40.5	40.3	54	-13.5	31.31	6.19	37.3	100	60	Average
5124	60.85	60.65	74	-13.15	31.31	6.19	37.3	100	60	Peak
5320	86.92	86.37			31.45	6.29	37.19	100	60	Average
5320	96.23	95.68			31.45	6.29	37.19	100	60	Peak
5424	41.31	40.64	54	-12.69	31.53	6.32	37.18	100	60	Average
5424	61.27	60.6	74	-12.73	31.53	6.32	37.18	100	60	Peak
15960	49.8	52.97	54	-4.2	36.9	12.49	52.56	169	193	Average
15960	60.26	63.43	74	-13.74	36.9	12.49	52.56	169	193	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 100	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5460	44.19	43.37	54	-9.81	31.56	6.34	37.08	168	47	Average
5460	61.73	60.91	74	-12.27	31.56	6.34	37.08	168	47	Peak
*5470	64.12	63.29	68.2	-4.08	31.57	6.34	37.08	168	47	Peak
5500	93.84	92.91			31.6	6.36	37.03	168	47	Average
5500	103.58	102.65			31.6	6.36	37.03	168	47	Peak
*5725	60.11	58.83	68.2	-8.09	31.96	6.75	37.43	168	47	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5458	41.77	40.95	54	-12.23	31.56	6.34	37.08	100	263	Average
5458	60.62	59.8	74	-13.38	31.56	6.34	37.08	100	263	Peak
*5470	59.76	58.93	68.2	-8.44	31.57	6.34	37.08	100	263	Peak
5500	88.79	87.86			31.6	6.36	37.03	100	263	Average
5500	98.66	97.73			31.6	6.36	37.03	100	263	Peak
*5725	60.33	59.05	68.2	-7.87	31.96	6.75	37.43	100	263	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 116	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5400	40.33	39.67	54	-13.67	31.52	6.32	37.18	172	60	Average
5400	61.3	60.64	74	-12.7	31.52	6.32	37.18	172	60	Peak
*5470	59.67	58.84	68.2	-8.53	31.57	6.34	37.08	172	60	Peak
5580	94.97	93.93			31.71	6.49	37.16	172	60	Average
5580	104.47	103.43			31.71	6.49	37.16	172	60	Peak
*5725	59.72	58.44	68.2	-8.48	31.96	6.75	37.43	172	60	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5450	38.68	37.86	54	-15.32	31.56	6.34	37.08	108	75	Average
5450	60.57	59.75	74	-13.43	31.56	6.34	37.08	108	75	Peak
*5470	59.63	58.8	68.2	-8.57	31.57	6.34	37.08	108	75	Peak
5580	89.9	88.86			31.71	6.49	37.16	108	75	Average
5580	99.35	98.31			31.71	6.49	37.16	108	75	Peak
*5725	59.35	58.07	68.2	-8.85	31.96	6.75	37.43	108	75	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 140	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5394	41.42	40.78	54	-12.58	31.51	6.31	37.18	182	45	Average
5394	60.28	59.64	74	-13.72	31.51	6.31	37.18	182	45	Peak
*5470	59.35	58.52	68.2	-8.85	31.57	6.34	37.08	182	45	Peak
5700	94.72	93.53			31.9	6.69	37.4	182	45	Average
5700	104.5	103.31			31.9	6.69	37.4	182	45	Peak
*5725	66.48	65.2	68.2	-1.72	31.96	6.75	37.43	182	45	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5430	39.14	38.4	54	-14.86	31.55	6.32	37.13	214	81	Average
5430	60.83	60.09	74	-13.17	31.55	6.32	37.13	214	81	Peak
*5470	58.82	57.99	68.2	-9.38	31.57	6.34	37.08	214	81	Peak
5700	90.24	89.05			31.9	6.69	37.4	214	81	Average
5700	99.84	98.65			31.9	6.69	37.4	214	81	Peak
*5725	64.01	62.73	68.2	-4.19	31.96	6.75	37.43	214	81	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 149	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.88	58.69	68.2	-8.32	31.93	6.69	37.43	180	48	Peak
*5725	65.07	63.79	78.2	-13.13	31.96	6.75	37.43	180	48	Peak
5745	93.75	92.48			31.99	6.75	37.47	180	48	Average
5745	103.18	101.91			31.99	6.75	37.47	180	48	Peak
*5850	60.16	58.64	78.2	-18.04	32.15	6.88	37.51	180	48	Peak
*5861	60.17	58.54	68.2	-8.03	32.18	6.95	37.5	180	48	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.39	59.2	68.2	-7.81	31.93	6.69	37.43	101	247	Peak
*5725	61.49	60.21	78.2	-16.71	31.96	6.75	37.43	101	247	Peak
5745	87.96	86.69			31.99	6.75	37.47	101	247	Average
5745	97.5	96.23			31.99	6.75	37.47	101	247	Peak
*5850	60.3	58.78	78.2	-17.9	32.15	6.88	37.51	101	247	Peak
*5861	59.65	58.02	68.2	-8.55	32.18	6.95	37.5	101	247	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 157	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	61.38	60.19	68.2	-6.82	31.93	6.69	37.43	178	41	Peak
*5725	59.82	58.54	78.2	-18.38	31.96	6.75	37.43	178	41	Peak
5785	93.92	92.6			32.04	6.82	37.54	178	41	Average
5785	103.29	101.97			32.04	6.82	37.54	178	41	Peak
*5850	60.51	58.99	78.2	-17.69	32.15	6.88	37.51	178	41	Peak
*5861	61.25	59.62	68.2	-6.95	32.18	6.95	37.5	178	41	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.89	59.7	68.2	-7.31	31.93	6.69	37.43	100	260	Peak
*5725	60.29	59.01	78.2	-17.91	31.96	6.75	37.43	100	260	Peak
5785	88.02	86.7			32.04	6.82	37.54	100	260	Average
5785	97.14	95.82			32.04	6.82	37.54	100	260	Peak
*5850	61.18	59.66	78.2	-17.02	32.15	6.88	37.51	100	260	Peak
*5861	59.86	58.23	68.2	-8.34	32.18	6.95	37.5	100	260	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 165	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	61.41	60.22	68.2	-6.79	31.93	6.69	37.43	184	61	Peak
*5725	60.23	58.95	78.2	-17.97	31.96	6.75	37.43	184	61	Peak
5825	94.12	92.65			32.12	6.88	37.53	184	61	Average
5825	103.39	101.92			32.12	6.88	37.53	184	61	Peak
*5850	66.07	64.55	78.2	-12.13	32.15	6.88	37.51	184	61	Peak
*5861	60.62	58.99	68.2	-7.58	32.18	6.95	37.5	184	61	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.09	58.9	68.2	-8.11	31.93	6.69	37.43	100	238	Peak
*5725	59.52	58.24	78.2	-18.68	31.96	6.75	37.43	100	238	Peak
5825	88.22	86.75			32.12	6.88	37.53	100	238	Average
5825	97.66	96.19			32.12	6.88	37.53	100	238	Peak
*5850	60.77	59.25	78.2	-17.43	32.15	6.88	37.51	100	238	Peak
*5861	59.82	58.19	68.2	-8.38	32.18	6.95	37.5	100	238	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5825 MHz: Fundamental frequency.
3. *: Out of restricted band

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 38	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5148	**52.84**	**52.64**	**54**	**-1.16**	**31.32**	**6.2**	**37.32**	**199**	**217**	**Average**
5148	72.42	72.22	74	-1.58	31.32	6.2	37.32	199	217	Peak
5190	91.26	91.03			31.35	6.22	37.34	199	217	Average
5190	100.57	100.34			31.35	6.22	37.34	199	217	Peak
5352	41.52	40.93	54	-12.48	31.48	6.29	37.18	199	217	Average
5352	60.75	60.16	74	-13.25	31.48	6.29	37.18	199	217	Peak
15570	47.05	48.23	54	-6.95	38.01	12.53	51.72	169	151	Average
15570	58.66	59.84	74	-15.34	38.01	12.53	51.72	169	151	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5146	46.68	46.48	54	-7.32	31.32	6.2	37.32	100	60	Average
5146	60.76	60.56	74	-13.24	31.32	6.2	37.32	100	60	Peak
5190	84.09	83.86			31.35	6.22	37.34	100	60	Average
5190	93.25	93.02			31.35	6.22	37.34	100	60	Peak
5456	38.76	37.94	54	-15.24	31.56	6.34	37.08	100	60	Average
5456	59.75	58.93	74	-14.25	31.56	6.34	37.08	100	60	Peak
15570	46.05	47.23	54	-7.95	38.01	12.53	51.72	161	172	Average
15570	58.67	59.85	74	-15.33	38.01	12.53	51.72	161	172	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5190 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 46	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5146	44.64	44.44	54	-9.36	31.32	6.2	37.32	189	218	Average
5146	63.48	63.28	74	-10.52	31.32	6.2	37.32	189	218	Peak
5230	91.65	91.34			31.39	6.24	37.32	189	218	Average
5230	101.11	100.8			31.39	6.24	37.32	189	218	Peak
5376	41.7	41.08	54	-12.3	31.49	6.31	37.18	189	218	Average
5376	60.75	60.13	74	-13.25	31.49	6.31	37.18	189	218	Peak
15690	46.6	49.9	54	-7.4	37.67	12.52	53.49	182	177	Average
15690	57.07	60.37	74	-16.93	37.67	12.52	53.49	182	177	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5062	39.44	39.27	54	-14.56	31.25	6.17	37.25	196	104	Average
5062	59.97	59.8	74	-14.03	31.25	6.17	37.25	196	104	Peak
5230	84.35	84.04			31.39	6.24	37.32	196	104	Average
5230	93.61	93.3			31.39	6.24	37.32	196	104	Peak
5420	38.8	38.13	54	-15.2	31.53	6.32	37.18	196	104	Average
5420	59.73	59.06	74	-14.27	31.53	6.32	37.18	196	104	Peak
15690	45.92	49.22	54	-8.08	37.67	12.52	53.49	155	163	Average
15690	56.83	60.13	74	-17.17	37.67	12.52	53.49	155	163	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5230 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 54	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5084	43.46	43.29	54	-10.54	31.27	6.17	37.27	184	217	Average
5084	61.09	60.92	74	-12.91	31.27	6.17	37.27	184	217	Peak
5270	91.07	90.68			31.41	6.25	37.27	184	217	Average
5270	99.98	99.59			31.41	6.25	37.27	184	217	Peak
5460	41.08	40.26	54	-12.92	31.56	6.34	37.08	184	217	Average
5460	62.13	61.31	74	-11.87	31.56	6.34	37.08	184	217	Peak
15810	48.89	50.35	54	-5.11	37.33	12.5	51.29	163	168	Average
15810	59.38	60.84	74	-14.62	37.33	12.5	51.29	163	168	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5026	38.58	38.44	54	-15.42	31.23	6.15	37.24	100	85	Average
5026	60.13	59.99	74	-13.87	31.23	6.15	37.24	100	85	Peak
5270	83.46	83.07			31.41	6.25	37.27	100	85	Average
5270	92.77	92.38			31.41	6.25	37.27	100	85	Peak
5430	38.83	38.09	54	-15.17	31.55	6.32	37.13	100	85	Average
5430	60.3	59.56	74	-13.7	31.55	6.32	37.13	100	85	Peak
15810	47.97	49.43	54	-6.03	37.33	12.5	51.29	172	201	Average
15810	58.79	60.25	74	-15.21	37.33	12.5	51.29	172	201	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5270 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 62	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5026	42.89	42.75	54	-11.11	31.23	6.15	37.24	182	225	Average
5026	60.17	60.03	74	-13.83	31.23	6.15	37.24	182	225	Peak
5310	90.46	89.93			31.45	6.27	37.19	182	225	Average
5310	99.22	98.69			31.45	6.27	37.19	182	225	Peak
5350	52	51.41	54	-2	31.48	6.29	37.18	182	225	Average
5350	70.45	69.86	74	-3.55	31.48	6.29	37.18	182	225	Peak
15910	48.21	50.21	54	-5.79	37.04	12.49	51.53	179	172	Average
15910	59.66	61.66	74	-14.34	37.04	12.49	51.53	179	172	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5022	39.2	39.06	54	-14.8	31.23	6.15	37.24	101	59	Average
5022	61.01	60.87	74	-12.99	31.23	6.15	37.24	101	59	Peak
5310	83.35	82.82			31.45	6.27	37.19	101	59	Average
5310	92.44	91.91			31.45	6.27	37.19	101	59	Peak
5350	45.38	44.79	54	-8.62	31.48	6.29	37.18	101	59	Average
5350	64.25	63.66	74	-9.75	31.48	6.29	37.18	101	59	Peak
15930	47.56	49.61	54	-6.44	36.99	12.49	51.53	177	208	Average
15930	57.81	59.86	74	-16.19	36.99	12.49	51.53	177	208	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5310 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 102	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5460	52.67	51.85	54	-1.33	31.56	6.34	37.08	187	47	Average
5460	67.38	66.56	74	-6.62	31.56	6.34	37.08	187	47	Peak
***5470**	**67.15**	**66.32**	**68.2**	**-1.05**	**31.57**	**6.34**	**37.08**	**187**	**47**	**Peak**
5510	89.62	88.72			31.6	6.36	37.06	187	47	Average
5510	99.34	98.44			31.6	6.36	37.06	187	47	Peak
*5725	60.03	58.75	68.2	-8.17	31.96	6.75	37.43	187	47	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5460	48.32	47.5	54	-5.68	31.56	6.34	37.08	100	258	Average
5460	64.63	63.81	74	-9.37	31.56	6.34	37.08	100	258	Peak
*5470	66.29	65.46	68.2	-1.91	31.57	6.34	37.08	100	258	Peak
5510	84.87	83.97			31.6	6.36	37.06	100	258	Average
5510	94.64	93.74			31.6	6.36	37.06	100	258	Peak
*5725	59.13	57.85	68.2	-9.07	31.96	6.75	37.43	100	258	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5510 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 110	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5452	41.68	40.86	54	-12.32	31.56	6.34	37.08	175	32	Average
5452	60.67	59.85	74	-13.33	31.56	6.34	37.08	175	32	Peak
*5470	60.82	59.99	68.2	-7.38	31.57	6.34	37.08	175	32	Peak
5550	89.32	88.31			31.68	6.42	37.09	175	32	Average
5550	98.71	97.7			31.68	6.42	37.09	175	32	Peak
*5725	60.62	59.34	68.2	-7.58	31.96	6.75	37.43	175	32	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5388	39.3	38.66	54	-14.7	31.51	6.31	37.18	102	83	Average
5388	60.62	59.98	74	-13.38	31.51	6.31	37.18	102	83	Peak
*5470	59.15	58.32	68.2	-9.05	31.57	6.34	37.08	102	83	Peak
5550	84.57	83.56			31.68	6.42	37.09	102	83	Average
5550	93.8	92.79			31.68	6.42	37.09	102	83	Peak
*5725	61.11	59.83	68.2	-7.09	31.96	6.75	37.43	102	83	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5550 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 134	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5412	41.07	40.4	54	-12.93	31.53	6.32	37.18	180	51	Average
5412	60.32	59.65	74	-13.68	31.53	6.32	37.18	180	51	Peak
*5470	59.16	58.33	68.2	-9.04	31.57	6.34	37.08	180	51	Peak
5670	91.48	90.32			31.88	6.62	37.34	180	51	Average
5670	100.79	99.63			31.88	6.62	37.34	180	51	Peak
*5725	65.63	64.35	68.2	-2.57	31.96	6.75	37.43	180	51	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5452	39.54	38.72	54	-14.46	31.56	6.34	37.08	100	71	Average
5452	60.48	59.66	74	-13.52	31.56	6.34	37.08	100	71	Peak
*5470	58.87	58.04	68.2	-9.33	31.57	6.34	37.08	100	71	Peak
5670	86.03	84.87			31.88	6.62	37.34	100	71	Average
5670	95.62	94.46			31.88	6.62	37.34	100	71	Peak
*5725	61.26	59.98	68.2	-6.94	31.96	6.75	37.43	100	71	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5670 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 151	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
***5714**	**65.25**	**64.06**	**68.2**	**-2.95**	**31.93**	**6.69**	**37.43**	**182**	**45**	**Peak**
*5725	65.31	64.03	78.2	-12.89	31.96	6.75	37.43	182	45	Peak
5755	90.16	88.87			32.01	6.75	37.47	182	45	Average
5755	99.84	98.55			32.01	6.75	37.47	182	45	Peak
*5850	60.64	59.12	78.2	-17.56	32.15	6.88	37.51	182	45	Peak
*5861	59.3	57.67	68.2	-8.9	32.18	6.95	37.5	182	45	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	61.42	60.23	68.2	-6.78	31.93	6.69	37.43	102	254	Peak
*5725	65.49	64.21	78.2	-12.71	31.96	6.75	37.43	102	254	Peak
5755	84.1	82.81			32.01	6.75	37.47	102	254	Average
5755	93.61	92.32			32.01	6.75	37.47	102	254	Peak
*5850	61.45	59.93	78.2	-16.75	32.15	6.88	37.51	102	254	Peak
*5861	61.42	59.79	68.2	-6.78	32.18	6.95	37.5	102	254	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5755 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 159	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	61.8	60.61	68.2	-6.4	31.93	6.69	37.43	185	34	Peak
*5725	61.91	60.63	78.2	-16.29	31.96	6.75	37.43	185	34	Peak
5795	90.1	88.75			32.07	6.82	37.54	185	34	Average
5795	99.51	98.16			32.07	6.82	37.54	185	34	Peak
*5850	62.17	60.65	78.2	-16.03	32.15	6.88	37.51	185	34	Peak
*5861	61.23	59.6	68.2	-6.97	32.18	6.95	37.5	185	34	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.25	58.06	68.2	-8.95	31.93	6.69	37.43	102	246	Peak
*5725	60.44	59.16	78.2	-17.76	31.96	6.75	37.43	102	246	Peak
5795	84.43	83.08			32.07	6.82	37.54	102	246	Average
5795	93.82	92.47			32.07	6.82	37.54	102	246	Peak
*5850	61.61	60.09	78.2	-16.59	32.15	6.88	37.51	102	246	Peak
*5861	59.4	57.77	68.2	-8.8	32.18	6.95	37.5	102	246	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5795 MHz: Fundamental frequency.
3. *: Out of restricted band

Mode B (MIMO)

ABOVE 1 GHz DATA :

802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 36	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5148	46.47	46.27	54	-7.53	31.32	6.2	37.32	169	154	Average
5148	61.82	61.62	74	-12.18	31.32	6.2	37.32	169	154	Peak
5180	94.51	94.28			31.35	6.22	37.34	169	154	Average
5180	103.69	103.46			31.35	6.22	37.34	169	154	Peak
5376	39.03	38.41	54	-14.97	31.49	6.31	37.18	169	154	Average
5376	60.56	59.94	74	-13.44	31.49	6.31	37.18	169	154	Peak
15540	52.7	53.42	54	-1.3	38.1	12.53	51.35	180	191	Average
15540	65.35	66.07	74	-8.65	38.1	12.53	51.35	180	191	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5150	43.07	42.87	54	-10.93	31.32	6.2	37.32	268	94	Average
5150	60.37	60.17	74	-13.63	31.32	6.2	37.32	268	94	Peak
5180	90.03	89.8			31.35	6.22	37.34	268	94	Average
5180	99.35	99.12			31.35	6.22	37.34	268	94	Peak
5392	38.5	37.86	54	-15.5	31.51	6.31	37.18	268	94	Average
5392	61.07	60.43	74	-12.93	31.51	6.31	37.18	268	94	Peak
15540	50.19	50.91	54	-3.81	38.1	12.53	51.35	179	200	Average
15540	61.65	62.37	74	-12.35	38.1	12.53	51.35	179	200	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 44	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5118	44.97	44.77	54	-9.03	31.29	6.19	37.28	165	162	Average
5118	61.12	60.92	74	-12.88	31.29	6.19	37.28	165	162	Peak
5220	95.41	95.16			31.37	6.24	37.36	165	162	Average
5220	104.38	104.13			31.37	6.24	37.36	165	162	Peak
5424	41.97	41.3	54	-12.03	31.53	6.32	37.18	165	162	Average
5424	60.63	59.96	74	-13.37	31.53	6.32	37.18	165	162	Peak
15660	52.19	55.05	54	-1.81	37.77	12.52	53.15	178	168	Average
15660	64.62	67.48	74	-9.38	37.77	12.52	53.15	178	168	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5050	42.01	41.87	54	-11.99	31.24	6.15	37.25	262	95	Average
5050	59.82	59.68	74	-14.18	31.24	6.15	37.25	262	95	Peak
5220	90.8	90.55			31.37	6.24	37.36	262	95	Average
5220	99.6	99.35			31.37	6.24	37.36	262	95	Peak
5354	39.14	38.55	54	-14.86	31.48	6.29	37.18	262	95	Average
5354	61.04	60.45	74	-12.96	31.48	6.29	37.18	262	95	Peak
15660	50.1	52.96	54	-3.9	37.77	12.52	53.15	174	184	Average
15660	61.22	64.08	74	-12.78	37.77	12.52	53.15	174	184	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 48	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5110	44.81	44.61	54	-9.19	31.29	6.19	37.28	162	150	Average
5110	60.94	60.74	74	-13.06	31.29	6.19	37.28	162	150	Peak
5240	95.54	95.22			31.39	6.25	37.32	162	150	Average
5240	104.9	104.58			31.39	6.25	37.32	162	150	Peak
5384	42.05	41.41	54	-11.95	31.51	6.31	37.18	162	150	Average
5384	61.77	61.13	74	-12.23	31.51	6.31	37.18	162	150	Peak
15720	**52.84**	**55.72**	**54**	**-1.16**	**37.57**	**12.52**	**52.97**	**174**	**175**	**Average**
15720	65.48	68.36	74	-8.52	37.57	12.52	52.97	174	175	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5110	41.65	41.45	54	-12.35	31.29	6.19	37.28	250	98	Average
5110	60.29	60.09	74	-13.71	31.29	6.19	37.28	250	98	Peak
5240	91.27	90.95			31.39	6.25	37.32	250	98	Average
5240	100.3	99.98			31.39	6.25	37.32	250	98	Peak
5396	39.25	38.6	54	-14.75	31.52	6.31	37.18	250	98	Average
5396	60.07	59.42	74	-13.93	31.52	6.31	37.18	250	98	Peak
15720	50.75	53.63	54	-3.25	37.57	12.52	52.97	162	179	Average
15720	61.78	64.66	74	-12.22	37.57	12.52	52.97	162	179	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 52	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5018	43.47	43.35	54	-10.53	31.21	6.15	37.24	164	156	Average
5018	60.36	60.24	74	-13.64	31.21	6.15	37.24	164	156	Peak
5260	93.97	93.58			31.41	6.25	37.27	164	156	Average
5260	103	102.61			31.41	6.25	37.27	164	156	Peak
5412	40.59	39.92	54	-13.41	31.53	6.32	37.18	164	156	Average
5412	61.58	60.91	74	-12.42	31.53	6.32	37.18	164	156	Peak
15780	52.93	54.39	54	-1.07	37.43	12.5	51.39	180	179	Average
15780	64.16	65.62	74	-9.84	37.43	12.5	51.39	180	179	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5118	40.82	40.62	54	-13.18	31.29	6.19	37.28	240	102	Average
5118	60.22	60.02	74	-13.78	31.29	6.19	37.28	240	102	Peak
5260	89.57	89.18			31.41	6.25	37.27	240	102	Average
5260	98.36	97.97			31.41	6.25	37.27	240	102	Peak
5430	39.09	38.35	54	-14.91	31.55	6.32	37.13	240	102	Average
5430	60.87	60.13	74	-13.13	31.55	6.32	37.13	240	102	Peak
15780	51.22	52.68	54	-2.78	37.43	12.5	51.39	168	178	Average
15780	64.19	65.65	74	-9.81	37.43	12.5	51.39	168	178	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 60	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5108	44.87	44.67	54	-9.13	31.29	6.19	37.28	177	151	Average
5108	60.79	60.59	74	-13.21	31.29	6.19	37.28	177	151	Peak
5300	94.1	93.58			31.44	6.27	37.19	177	151	Average
5300	103.17	102.65			31.44	6.27	37.19	177	151	Peak
5446	40.44	39.67	54	-13.56	31.56	6.34	37.13	177	151	Average
5446	61.41	60.64	74	-12.59	31.56	6.34	37.13	177	151	Peak
15900	**52.94**	**54.37**	**54**	**-1.06**	**37.09**	**12.49**	**51.01**	**174**	**163**	**Average**
15900	65.29	66.72	74	-8.71	37.09	12.49	51.01	174	163	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5078	41.72	41.55	54	-12.28	31.27	6.17	37.27	239	93	Average
5078	60.76	60.59	74	-13.24	31.27	6.17	37.27	239	93	Peak
5300	89.52	89			31.44	6.27	37.19	239	93	Average
5300	98.23	97.71			31.44	6.27	37.19	239	93	Peak
5432	38.82	38.08	54	-15.18	31.55	6.32	37.13	239	93	Average
5432	60.72	59.98	74	-13.28	31.55	6.32	37.13	239	93	Peak
15900	51.77	53.2	54	-2.23	37.09	12.49	51.01	172	173	Average
15900	63.89	65.32	74	-10.11	37.09	12.49	51.01	172	173	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 64	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5026	41.21	41.07	54	-12.79	31.23	6.15	37.24	165	149	Average
5026	60.05	59.91	74	-13.95	31.23	6.15	37.24	165	149	Peak
5320	94.37	93.82			31.45	6.29	37.19	165	149	Average
5320	103.67	103.12			31.45	6.29	37.19	165	149	Peak
5348	45.63	45.04	54	-8.37	31.48	6.29	37.18	165	149	Average
5348	62.58	61.99	74	-11.42	31.48	6.29	37.18	165	149	Peak
15960	52.79	55.96	54	-1.21	36.9	12.49	52.56	176	175	Average
15960	65.2	68.37	74	-8.8	36.9	12.49	52.56	176	175	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5054	39.48	39.32	54	-14.52	31.24	6.17	37.25	235	101	Average
5054	61.11	60.95	74	-12.89	31.24	6.17	37.25	235	101	Peak
5320	89.74	89.19			31.45	6.29	37.19	235	101	Average
5320	98.63	98.08			31.45	6.29	37.19	235	101	Peak
5414	41.42	40.75	54	-12.58	31.53	6.32	37.18	235	101	Average
5414	59.97	59.3	74	-14.03	31.53	6.32	37.18	235	101	Peak
15960	51.81	54.98	54	-2.19	36.9	12.49	52.56	162	157	Average
15960	63.2	66.37	74	-10.8	36.9	12.49	52.56	162	157	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 100	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5398	41.28	40.62	54	-12.72	31.52	6.32	37.18	173	243	Average
5398	60.82	60.16	74	-13.18	31.52	6.32	37.18	173	243	Peak
*5470	60.5	59.67	68.2	-7.7	31.57	6.34	37.08	173	243	Peak
5500	92.37	91.44	54			6.36	37.03	173	243	Average
5500	101.88	100.95	74			6.36	37.03	173	243	Peak
*5725	59.85	58.57	68.2	-8.35	31.96	6.75	37.43	173	243	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5448	40.08	39.31	54	-13.92	31.56	6.34	37.13	104	250	Average
5448	60.49	59.72	74	-13.51	31.56	6.34	37.13	104	250	Peak
*5470	59.02	58.19	68.2	-9.18	31.57	6.34	37.08	104	250	Peak
5500	87.35	86.42	54			6.36	37.03	104	250	Average
5500	97.09	96.16	74			6.36	37.03	104	250	Peak
*5725	60.45	59.17	68.2	-7.75	31.96	6.75	37.43	104	250	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 116	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5452	39.86	39.04	54	-14.14	31.56	6.34	37.08	161	230	Average
5452	60.67	59.85	74	-13.33	31.56	6.34	37.08	161	230	Peak
*5470	58.44	57.61	68.2	-9.76	31.57	6.34	37.08	161	230	Peak
5580	92.34	91.3			31.71	6.49	37.16	161	230	Average
5580	101.74	100.7			31.71	6.49	37.16	161	230	Peak
*5725	59.16	57.88	68.2	-9.04	31.96	6.75	37.43	161	230	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5432	38.77	38.03	54	-15.23	31.55	6.32	37.13	186	252	Average
5432	60.4	59.66	74	-13.6	31.55	6.32	37.13	186	252	Peak
*5470	58.03	57.2	68.2	-10.17	31.57	6.34	37.08	186	252	Peak
5580	87.25	86.21			31.71	6.49	37.16	186	252	Average
5580	96.93	95.89			31.71	6.49	37.16	186	252	Peak
*5725	58.44	57.16	68.2	-9.76	31.96	6.75	37.43	186	252	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 140	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5432	45.35	44.61	54	-8.65	31.55	6.32	37.13	181	226	Average
5432	60.96	60.22	74	-13.04	31.55	6.32	37.13	181	226	Peak
*5470	59.51	58.68	68.2	-8.69	31.57	6.34	37.08	181	226	Peak
5700	92.92	91.73			31.9	6.69	37.4	181	226	Average
5700	102.66	101.47			31.9	6.69	37.4	181	226	Peak
*5725	62.55	61.27	68.2	-5.65	31.96	6.75	37.43	181	226	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5450	41.19	40.37	54	-12.81	31.56	6.34	37.08	100	253	Average
5450	60.29	59.47	74	-13.71	31.56	6.34	37.08	100	253	Peak
*5470	58.54	57.71	68.2	-9.66	31.57	6.34	37.08	100	253	Peak
5700	88.2	87.01			31.9	6.69	37.4	100	253	Average
5700	97.92	96.73			31.9	6.69	37.4	100	253	Peak
*5725	59.38	58.1	68.2	-8.82	31.96	6.75	37.43	100	253	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 149	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.45	58.26	68.2	-8.75	31.93	6.69	37.43	102	98	Peak
*5725	59.49	58.21	78.2	-18.71	31.96	6.75	37.43	102	98	Peak
5745	86.5	85.23			31.99	6.75	37.47	102	98	Average
5745	95.66	94.39			31.99	6.75	37.47	102	98	Peak
*5850	59.21	57.69	78.2	-18.99	32.15	6.88	37.51	102	98	Peak
*5861	60.23	58.6	68.2	-7.97	32.18	6.95	37.5	102	98	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.73	59.54	68.2	-7.47	31.93	6.69	37.43	165	226	Peak
*5725	61.87	60.59	78.2	-16.33	31.96	6.75	37.43	165	226	Peak
5745	91.19	89.92			31.99	6.75	37.47	165	226	Average
5745	100.43	99.16			31.99	6.75	37.47	165	226	Peak
*5850	59.13	57.61	78.2	-19.07	32.15	6.88	37.51	165	226	Peak
*5861	60.14	58.51	68.2	-8.06	32.18	6.95	37.5	165	226	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 157	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.93	58.74	68.2	-8.27	31.93	6.69	37.43	206	231	Peak
*5725	60.51	59.23	78.2	-17.69	31.96	6.75	37.43	206	231	Peak
5785	91.71	90.39			32.04	6.82	37.54	206	231	Average
5785	100.74	99.42			32.04	6.82	37.54	206	231	Peak
*5850	59.9	58.38	78.2	-18.3	32.15	6.88	37.51	206	231	Peak
*5861	61.03	59.4	68.2	-7.17	32.18	6.95	37.5	206	231	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.56	58.37	68.2	-8.64	31.93	6.69	37.43	101	108	Peak
*5725	59.45	58.17	78.2	-18.75	31.96	6.75	37.43	101	108	Peak
5785	86.61	85.29			32.04	6.82	37.54	101	108	Average
5785	95.65	94.33			32.04	6.82	37.54	101	108	Peak
*5850	59.43	57.91	78.2	-18.77	32.15	6.88	37.51	101	108	Peak
*5861	59.83	58.2	68.2	-8.37	32.18	6.95	37.5	101	108	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 165	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.98	58.79	68.2	-8.22	31.93	6.69	37.43	168	232	Peak
*5725	59.91	58.63	78.2	-18.29	31.96	6.75	37.43	168	232	Peak
5825	91.75	90.28			32.12	6.88	37.53	168	232	Average
5825	100.88	99.41			32.12	6.88	37.53	168	232	Peak
*5850	61.38	59.86	78.2	-16.82	32.15	6.88	37.51	168	232	Peak
*5861	60.01	58.38	68.2	-8.19	32.18	6.95	37.5	168	232	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.86	58.67	68.2	-8.34	31.93	6.69	37.43	100	104	Peak
*5725	59.74	58.46	78.2	-18.46	31.96	6.75	37.43	100	104	Peak
5825	86.67	85.2			32.12	6.88	37.53	100	104	Average
5825	95.96	94.49			32.12	6.88	37.53	100	104	Peak
*5850	58.97	57.45	78.2	-19.23	32.15	6.88	37.51	100	104	Peak
*5861	59.55	57.92	68.2	-8.65	32.18	6.95	37.5	100	104	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5825 MHz: Fundamental frequency.
3. *: Out of restricted band

802.11n (HT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 36	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5028	45.76	45.62	54	-8.24	31.23	6.15	37.24	195	145	Average
5028	61.31	61.17	74	-12.69	31.23	6.15	37.24	195	145	Peak
5180	93.61	93.38			31.35	6.22	37.34	195	145	Average
5180	102.52	102.29			31.35	6.22	37.34	195	145	Peak
5456	39.01	38.19	54	-14.99	31.56	6.34	37.08	195	145	Average
5456	60.32	59.5	74	-13.68	31.56	6.34	37.08	195	145	Peak
15540	50.64	51.36	54	-3.36	38.1	12.53	51.35	181	154	Average
15540	61.31	62.03	74	-12.69	38.1	12.53	51.35	181	154	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5134	41.85	41.64	54	-12.15	31.31	6.2	37.3	268	85	Average
5134	60.52	60.31	74	-13.48	31.31	6.2	37.3	268	85	Peak
5180	89.33	89.1			31.35	6.22	37.34	268	85	Average
5180	98.18	97.95			31.35	6.22	37.34	268	85	Peak
5376	38.45	37.83	54	-15.55	31.49	6.31	37.18	268	85	Average
5376	60.2	59.58	74	-13.8	31.49	6.31	37.18	268	85	Peak
15540	47.46	48.18	54	-6.54	38.1	12.53	51.35	185	207	Average
15540	59.43	60.15	74	-14.57	38.1	12.53	51.35	185	207	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5180 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 44	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5050	43	42.86	54	-11	31.24	6.15	37.25	173	150	Average
5050	60.76	60.62	74	-13.24	31.24	6.15	37.25	173	150	Peak
5220	93.58	93.33			31.37	6.24	37.36	173	150	Average
5220	102.69	102.44			31.37	6.24	37.36	173	150	Peak
5410	41.01	40.35	54	-12.99	31.52	6.32	37.18	173	150	Average
5410	60.6	59.94	74	-13.4	31.52	6.32	37.18	173	150	Peak
15660	50.11	52.97	54	-3.89	37.77	12.52	53.15	172	160	Average
15660	61.79	64.65	74	-12.21	37.77	12.52	53.15	172	160	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5042	40.88	40.74	54	-13.12	31.24	6.15	37.25	262	106	Average
5042	59.95	59.81	74	-14.05	31.24	6.15	37.25	262	106	Peak
5220	89.3	89.05			31.37	6.24	37.36	262	106	Average
5220	98.53	98.28			31.37	6.24	37.36	262	106	Peak
5444	38.85	38.09	54	-15.15	31.55	6.34	37.13	262	106	Average
5444	60.72	59.96	74	-13.28	31.55	6.34	37.13	262	106	Peak
15660	47.28	50.14	54	-6.72	37.77	12.52	53.15	168	150	Average
15660	59.11	61.97	74	-14.89	37.77	12.52	53.15	168	150	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5220 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 48	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5114	43.79	43.59	54	-10.21	31.29	6.19	37.28	171	139	Average
5114	60.8	60.6	74	-13.2	31.29	6.19	37.28	171	139	Peak
5240	93.68	93.36			31.39	6.25	37.32	171	139	Average
5240	102.69	102.37			31.39	6.25	37.32	171	139	Peak
5450	41.1	40.28	54	-12.9	31.56	6.34	37.08	171	139	Average
5450	60.57	59.75	74	-13.43	31.56	6.34	37.08	171	139	Peak
15720	50.07	52.95	54	-3.93	37.57	12.52	52.97	176	181	Average
15720	61.96	64.84	74	-12.04	37.57	12.52	52.97	176	181	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5050	40.87	40.73	54	-13.13	31.24	6.15	37.25	262	85	Average
5050	60.37	60.23	74	-13.63	31.24	6.15	37.25	262	85	Peak
5240	89.32	89			31.39	6.25	37.32	262	85	Average
5240	98.4	98.08			31.39	6.25	37.32	262	85	Peak
5440	38.71	37.95	54	-15.29	31.55	6.34	37.13	262	85	Average
5440	60.13	59.37	74	-13.87	31.55	6.34	37.13	262	85	Peak
15720	47.55	50.43	54	-6.45	37.57	12.52	52.97	167	159	Average
15720	58.84	61.72	74	-15.16	37.57	12.52	52.97	167	159	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5240 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 52	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5144	43.12	42.92	54	-10.88	31.32	6.2	37.32	169	141	Average
5144	61.94	61.74	74	-12.06	31.32	6.2	37.32	169	141	Peak
5260	93.53	93.14			31.41	6.25	37.27	169	141	Average
5260	102.76	102.37			31.41	6.25	37.27	169	141	Peak
5412	40.66	39.99	54	-13.34	31.53	6.32	37.18	169	141	Average
5412	61.1	60.43	74	-12.9	31.53	6.32	37.18	169	141	Peak
15780	51	52.46	54	-3	37.43	12.5	51.39	183	161	Average
15780	62.5	63.96	74	-11.5	37.43	12.5	51.39	183	161	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5146	40.82	40.62	54	-13.18	31.32	6.2	37.32	242	107	Average
5146	60.47	60.27	74	-13.53	31.32	6.2	37.32	242	107	Peak
5260	88.79	88.4			31.41	6.25	37.27	242	107	Average
5260	97.72	97.33			31.41	6.25	37.27	242	107	Peak
5388	38.83	38.19	54	-15.17	31.51	6.31	37.18	242	107	Average
5388	61.99	61.35	74	-12.01	31.51	6.31	37.18	242	107	Peak
15780	48.82	50.28	54	-5.18	37.43	12.5	51.39	169	174	Average
15780	59.8	61.26	74	-14.2	37.43	12.5	51.39	169	174	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5260 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 60	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5118	44.83	44.63	54	-9.17	31.29	6.19	37.28	177	167	Average
5118	60.49	60.29	74	-13.51	31.29	6.19	37.28	177	167	Peak
5300	93.46	92.94			31.44	6.27	37.19	177	167	Average
5300	102.65	102.13			31.44	6.27	37.19	177	167	Peak
5442	40.14	39.38	54	-13.86	31.55	6.34	37.13	177	167	Average
5442	60.65	59.89	74	-13.35	31.55	6.34	37.13	177	167	Peak
15900	50.48	51.91	54	-3.52	37.09	12.49	51.01	172	183	Average
15900	63.41	64.84	74	-10.59	37.09	12.49	51.01	172	183	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5064	41.91	41.74	54	-12.09	31.25	6.17	37.25	236	88	Average
5064	60.5	60.33	74	-13.5	31.25	6.17	37.25	236	88	Peak
5300	88.02	87.5			31.44	6.27	37.19	236	88	Average
5300	97.28	96.76			31.44	6.27	37.19	236	88	Peak
5450	38.73	37.91	54	-15.27	31.56	6.34	37.08	236	88	Average
5450	60.55	59.73	74	-13.45	31.56	6.34	37.08	236	88	Peak
15900	48.99	50.42	54	-5.01	37.09	12.49	51.01	171	142	Average
15900	58.57	60	74	-15.43	37.09	12.49	51.01	171	142	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5300 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 64	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5132	45.31	45.1	54	-8.69	31.31	6.2	37.3	170	166	Average
5132	60.65	60.44	74	-13.35	31.31	6.2	37.3	170	166	Peak
5320	92.98	92.43			31.45	6.29	37.19	170	166	Average
5320	102.06	101.51			31.45	6.29	37.19	170	166	Peak
5348	42.29	41.7	54	-11.71	31.48	6.29	37.18	170	166	Average
5348	62.41	61.82	74	-11.59	31.48	6.29	37.18	170	166	Peak
15960	49.18	52.35	54	-4.82	36.9	12.49	52.56	177	192	Average
15960	61.52	64.69	74	-12.48	36.9	12.49	52.56	177	192	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5130	41.85	41.64	54	-12.15	31.31	6.2	37.3	231	109	Average
5130	60.55	60.34	74	-13.45	31.31	6.2	37.3	231	109	Peak
5320	87.83	87.28			31.45	6.29	37.19	231	109	Average
5320	96.99	96.44			31.45	6.29	37.19	231	109	Peak
5400	39.51	38.85	54	-14.49	31.52	6.32	37.18	231	109	Average
5400	61.27	60.61	74	-12.73	31.52	6.32	37.18	231	109	Peak
15960	47.35	50.52	54	-6.65	36.9	12.49	52.56	179	159	Average
15960	58.57	61.74	74	-15.43	36.9	12.49	52.56	179	159	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5320 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 100	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5450	40.92	40.1	54	-13.08	31.56	6.34	37.08	182	211	Average
5450	60.98	60.16	74	-13.02	31.56	6.34	37.08	182	211	Peak
*5470	60.02	59.19	68.2	-8.18	31.57	6.34	37.08	182	211	Peak
5500	91.29	90.36			31.6	6.36	37.03	182	211	Average
5500	100.7	99.77			31.6	6.36	37.03	182	211	Peak
*5725	60.91	59.63	68.2	-7.29	31.96	6.75	37.43	182	211	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5430	39.4	38.66	54	-14.6	31.55	6.32	37.13	105	264	Average
5430	60.85	60.11	74	-13.15	31.55	6.32	37.13	105	264	Peak
*5470	58.88	58.05	68.2	-9.32	31.57	6.34	37.08	105	264	Peak
5500	86.6	85.67			31.6	6.36	37.03	105	264	Average
5500	95.94	95.01			31.6	6.36	37.03	105	264	Peak
*5725	60.42	59.14	68.2	-7.78	31.96	6.75	37.43	105	264	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5500 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 116	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5378	40.25	39.61	54	-13.75	31.51	6.31	37.18	163	220	Average
5378	61.22	60.58	74	-12.78	31.51	6.31	37.18	163	220	Peak
*5470	58.91	58.08	68.2	-9.29	31.57	6.34	37.08	163	220	Peak
5580	91.01	89.97			31.71	6.49	37.16	163	220	Average
5580	100.58	99.54			31.71	6.49	37.16	163	220	Peak
*5725	60.6	59.32	68.2	-7.6	31.96	6.75	37.43	163	220	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5382	38.49	37.85	54	-15.51	31.51	6.31	37.18	102	270	Average
5382	60.48	59.84	74	-13.52	31.51	6.31	37.18	102	270	Peak
*5470	59.35	58.52	68.2	-8.85	31.57	6.34	37.08	102	270	Peak
5580	86.13	85.09			31.71	6.49	37.16	102	270	Average
5580	95.97	94.93			31.71	6.49	37.16	102	270	Peak
*5725	60.24	58.96	68.2	-7.96	31.96	6.75	37.43	102	270	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5580 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 140	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5418	42.86	42.19	54	-11.14	31.53	6.32	37.18	166	222	Average
5418	61.48	60.81	74	-12.52	31.53	6.32	37.18	166	222	Peak
*5470	59.95	59.12	68.2	-8.25	31.57	6.34	37.08	166	222	Peak
5700	91.49	90.3			31.9	6.69	37.4	166	222	Average
5700	101.23	100.04			31.9	6.69	37.4	166	222	Peak
*5725	61.38	60.1	68.2	-6.82	31.96	6.75	37.43	166	222	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5400	39.69	39.03	54	-14.31	31.52	6.32	37.18	100	266	Average
5400	61.75	61.09	74	-12.25	31.52	6.32	37.18	100	266	Peak
*5470	58.53	57.7	68.2	-9.67	31.57	6.34	37.08	100	266	Peak
5700	86.59	85.4			31.9	6.69	37.4	100	266	Average
5700	96.27	95.08			31.9	6.69	37.4	100	266	Peak
*5725	60.28	59	68.2	-7.92	31.96	6.75	37.43	100	266	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5700 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 149	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
***5714**	**62.08**	**60.89**	**68.2**	**-6.12**	**31.93**	**6.69**	**37.43**	**188**	**211**	**Peak**
*5725	62.66	61.38	78.2	-15.54	31.96	6.75	37.43	188	211	Peak
5745	91.49	90.22			31.99	6.75	37.47	188	211	Average
5745	100.58	99.31			31.99	6.75	37.47	188	211	Peak
*5850	60.74	59.22	78.2	-17.46	32.15	6.88	37.51	188	211	Peak
*5861	59.77	58.14	68.2	-8.43	32.18	6.95	37.5	188	211	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	61.55	60.36	68.2	-6.65	31.93	6.69	37.43	102	117	Peak
*5725	61.95	60.67	78.2	-16.25	31.96	6.75	37.43	102	117	Peak
5745	86.37	85.1			31.99	6.75	37.47	102	117	Average
5745	95.57	94.3			31.99	6.75	37.47	102	117	Peak
*5850	59.93	58.41	78.2	-18.27	32.15	6.88	37.51	102	117	Peak
*5861	60.1	58.47	68.2	-8.1	32.18	6.95	37.5	102	117	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5745 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 157	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.34	59.15	68.2	-7.86	31.93	6.69	37.43	178	223	Peak
*5725	59.29	58.01	78.2	-18.91	31.96	6.75	37.43	178	223	Peak
5785	90.97	89.65			32.04	6.82	37.54	178	223	Average
5785	100.86	99.54			32.04	6.82	37.54	178	223	Peak
*5850	60.1	58.58	78.2	-18.1	32.15	6.88	37.51	178	223	Peak
*5861	61.19	59.56	68.2	-7.01	32.18	6.95	37.5	178	223	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.45	59.26	68.2	-7.75	31.93	6.69	37.43	101	98	Peak
*5725	59.78	58.5	78.2	-18.42	31.96	6.75	37.43	101	98	Peak
5785	86.48	85.16			32.04	6.82	37.54	101	98	Average
5785	95.47	94.15			32.04	6.82	37.54	101	98	Peak
*5850	61.24	59.72	78.2	-16.96	32.15	6.88	37.51	101	98	Peak
*5861	60.22	58.59	68.2	-7.98	32.18	6.95	37.5	101	98	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5785 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 165	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.15	57.96	68.2	-9.05	31.93	6.69	37.43	176	217	Peak
*5725	39.68	38.4	78.2	-38.52	31.96	6.75	37.43	176	217	Peak
5825	91.78	90.31			32.12	6.88	37.53	176	217	Average
5825	100.94	99.47			32.12	6.88	37.53	176	217	Peak
*5850	62.61	61.09	78.2	-15.59	32.15	6.88	37.51	176	217	Peak
*5861	61.58	59.95	68.2	-6.62	32.18	6.95	37.5	176	217	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.69	58.5	68.2	-8.51	31.93	6.69	37.43	100	118	Peak
*5725	59.18	57.9	78.2	-19.02	31.96	6.75	37.43	100	118	Peak
5825	86.98	85.51			32.12	6.88	37.53	100	118	Average
5825	96.1	94.63			32.12	6.88	37.53	100	118	Peak
*5850	60.6	59.08	78.2	-17.6	32.15	6.88	37.51	100	118	Peak
*5861	61.1	59.47	68.2	-7.1	32.18	6.95	37.5	100	118	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5825 MHz: Fundamental frequency.
3. *: Out of restricted band

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 38	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5150	49.91	49.71	54	-4.09	31.32	6.2	37.32	165	148	Average
5150	64.84	64.64	74	-9.16	31.32	6.2	37.32	165	148	Peak
5190	90.82	90.59			31.35	6.22	37.34	165	148	Average
5190	99.82	99.59			31.35	6.22	37.34	165	148	Peak
5428	40.63	39.91	54	-13.37	31.53	6.32	37.13	165	148	Average
5428	61.1	60.38	74	-12.9	31.53	6.32	37.13	165	148	Peak
15570	48.96	50.14	54	-5.04	38.01	12.53	51.72	179	172	Average
15570	59.67	60.85	74	-14.33	38.01	12.53	51.72	179	172	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5146	45.87	45.67	54	-8.13	31.32	6.2	37.32	256	96	Average
5146	61.34	61.14	74	-12.66	31.32	6.2	37.32	256	96	Peak
5190	86.18	85.95			31.35	6.22	37.34	256	96	Average
5190	95.46	95.23			31.35	6.22	37.34	256	96	Peak
5398	39.07	38.41	54	-14.93	31.52	6.32	37.18	256	96	Average
5398	60.32	59.66	74	-13.68	31.52	6.32	37.18	256	96	Peak
15570	46.97	48.15	54	-7.03	38.01	12.53	51.72	173	164	Average
15570	59.29	60.47	74	-14.71	38.01	12.53	51.72	173	164	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5190 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 46	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5068	42.8	42.65	54	-11.2	31.25	6.17	37.27	160	137	Average
5068	60.38	60.23	74	-13.62	31.25	6.17	37.27	160	137	Peak
5230	90.87	90.56			31.39	6.24	37.32	160	137	Average
5230	99.86	99.55			31.39	6.24	37.32	160	137	Peak
5364	40.13	39.51	54	-13.87	31.49	6.31	37.18	160	137	Average
5364	61.92	61.3	74	-12.08	31.49	6.31	37.18	160	137	Peak
15690	48.53	51.83	54	-5.47	37.67	12.52	53.49	173	174	Average
15690	58.88	62.18	74	-15.12	37.67	12.52	53.49	173	174	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5014	40.66	40.53	54	-13.34	31.21	6.15	37.23	264	112	Average
5014	60.1	59.97	74	-13.9	31.21	6.15	37.23	264	112	Peak
5230	86.23	85.92			31.39	6.24	37.32	264	112	Average
5230	95.48	95.17			31.39	6.24	37.32	264	112	Peak
5444	39.18	38.42	54	-14.82	31.55	6.34	37.13	264	112	Average
5444	60.8	60.04	74	-13.2	31.55	6.34	37.13	264	112	Peak
15690	46.92	48.1	54	-7.08	38.01	12.53	51.72	170	186	Average
15690	58.41	59.59	74	-15.59	38.01	12.53	51.72	170	186	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5230 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 54	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5132	41.76	41.55	54	-12.24	31.31	6.2	37.3	167	144	Average
5132	60.24	60.03	74	-13.76	31.31	6.2	37.3	167	144	Peak
5270	88.87	88.48			31.41	6.25	37.27	167	144	Average
5270	97.89	97.5			31.41	6.25	37.27	167	144	Peak
5424	39.78	39.11	54	-14.22	31.53	6.32	37.18	167	144	Average
5424	60.42	59.75	74	-13.58	31.53	6.32	37.18	167	144	Peak
15810	48.81	50.27	54	-5.19	37.33	12.5	51.29	182	164	Average
15810	59.98	61.44	74	-14.02	37.33	12.5	51.29	162	164	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5062	40.01	39.84	54	-13.99	31.25	6.17	37.25	238	82	Average
5062	60.65	60.48	74	-13.35	31.25	6.17	37.25	238	82	Peak
5270	84.11	83.72			31.41	6.25	37.27	238	82	Average
5270	93.17	92.78			31.41	6.25	37.27	238	82	Peak
5436	39.22	38.48	54	-14.78	31.55	6.32	37.13	238	82	Average
5436	60.34	59.6	74	-13.66	31.55	6.32	37.13	238	82	Peak
15810	47.35	48.81	54	-6.65	37.33	12.5	51.29	168	181	Average
15810	59.4	60.86	74	-14.6	37.33	12.5	51.29	168	181	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5270 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 62	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5074	41.78	41.61	54	-12.22	31.27	6.17	37.27	171	170	Average
5074	60.44	60.27	74	-13.56	31.27	6.17	37.27	171	170	Peak
5310	88.7	88.17			31.45	6.27	37.19	171	170	Average
5310	97.72	97.19			31.45	6.27	37.19	171	170	Peak
5350	45.8	45.21	54	-8.2	31.48	6.29	37.18	171	170	Average
5350	65.28	64.69	74	-8.72	31.48	6.29	37.18	171	170	Peak
15930	48.33	50.38	54	-5.67	36.99	12.49	51.53	189	171	Average
15930	59.12	61.17	74	-14.88	36.99	12.49	51.53	189	171	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5146	40.22	40.02	54	-13.78	31.32	6.2	37.32	248	105	Average
5146	60.84	60.64	74	-13.16	31.32	6.2	37.32	248	105	Peak
5310	83.58	83.05			31.45	6.27	37.19	248	105	Average
5310	92.65	92.12			31.45	6.27	37.19	248	105	Peak
5434	41.84	41.1	54	-12.16	31.55	6.32	37.13	248	105	Average
5434	60.62	59.88	74	-13.38	31.55	6.32	37.13	248	105	Peak
15930	47.5	49.55	54	-6.5	36.99	12.49	51.53	167	165	Average
15930	57.73	59.78	74	-16.27	36.99	12.49	51.53	167	165	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5310 MHz: Fundamental frequency.

EUT Test Condition		Measurement Detail	
Channel	Channel 102	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5460	45.49	44.67	54	-8.51	31.56	6.34	37.08	162	223	Average
5460	63.16	62.34	74	-10.84	31.56	6.34	37.08	162	223	Peak
***5470**	**65.09**	**64.26**	**68.2**	**-3.11**	**31.57**	**6.34**	**37.08**	**162**	**223**	**Peak**
5510	88.09	87.19			31.6	6.36	37.06	162	223	Average
5510	97.97	97.07			31.6	6.36	37.06	162	223	Peak
*5725	60.27	58.99	68.2	-7.93	31.96	6.75	37.43	162	223	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5410	42.16	41.5	54	-11.84	31.52	6.32	37.18	104	248	Average
5410	61.75	61.09	74	-12.25	31.52	6.32	37.18	104	248	Peak
*5470	63.98	63.15	68.2	-4.22	31.57	6.34	37.08	104	248	Peak
5510	83.13	82.23			31.6	6.36	37.06	104	248	Average
5510	92.98	92.08			31.6	6.36	37.06	104	248	Peak
*5725	60.23	58.95	68.2	-7.97	31.96	6.75	37.43	104	248	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5510 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 110	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5376	39.66	39.04	54	-14.34	31.49	6.31	37.18	162	237	Average
5376	60	59.38	74	-14	31.49	6.31	37.18	162	237	Peak
*5470	58.82	57.99	68.2	-9.38	31.57	6.34	37.08	162	237	Peak
5550	87.76	86.75			31.68	6.42	37.09	162	237	Average
5550	97.66	96.65			31.68	6.42	37.09	162	237	Peak
*5725	59.68	58.4	68.2	-8.52	31.96	6.75	37.43	162	237	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5450	39.28	38.46	54	-14.72	31.56	6.34	37.08	103	246	Average
5450	59.66	58.84	74	-14.34	31.56	6.34	37.08	103	246	Peak
*5470	58.43	57.6	68.2	-9.77	31.57	6.34	37.08	103	246	Peak
5550	82.96	81.95			31.68	6.42	37.09	103	246	Average
5550	92.68	91.67			31.68	6.42	37.09	103	246	Peak
*5725	58.46	57.18	68.2	-9.74	31.96	6.75	37.43	103	246	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5550 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 134	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5370	41.15	40.53	54	-12.85	31.49	6.31	37.18	187	210	Average
5370	61.05	60.43	74	-12.95	31.49	6.31	37.18	187	210	Peak
*5470	59.99	59.16	68.2	-8.21	31.57	6.34	37.08	187	210	Peak
5670	88.63	87.47			31.88	6.62	37.34	187	210	Average
5670	98.16	97			31.88	6.62	37.34	187	210	Peak
*5725	61.51	60.23	68.2	-6.69	31.96	6.75	37.43	187	210	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
5410	39.15	38.49	54	-14.85	31.52	6.32	37.18	100	258	Average
5410	60.37	59.71	74	-13.63	31.52	6.32	37.18	100	258	Peak
*5470	59.79	58.96	68.2	-8.41	31.57	6.34	37.08	100	258	Peak
5670	83.66	82.5			31.88	6.62	37.34	100	258	Average
5670	93.41	92.25			31.88	6.62	37.34	100	258	Peak
*5725	59.59	58.31	68.2	-8.61	31.96	6.75	37.43	100	258	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5670 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 151	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	61.35	60.16	68.2	-6.85	31.93	6.69	37.43	183	210	Peak
*5725	64.1	62.82	78.2	-14.1	31.96	6.75	37.43	183	210	Peak
5755	87.74	86.45			32.01	6.75	37.47	183	210	Average
5755	96.88	95.59			32.01	6.75	37.47	183	210	Peak
*5850	60.56	59.04	78.2	-17.64	32.15	6.88	37.51	183	210	Peak
*5861	59.81	58.18	68.2	-8.39	32.18	6.95	37.5	183	210	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.88	59.69	68.2	-7.32	31.93	6.69	37.43	102	92	Peak
*5725	61.86	60.58	78.2	-16.34	31.96	6.75	37.43	102	92	Peak
5755	83.04	81.75			32.01	6.75	37.47	102	92	Average
5755	91.96	90.67			32.01	6.75	37.47	102	92	Peak
*5850	60.67	59.15	78.2	-17.53	32.15	6.88	37.51	102	92	Peak
*5861	60.91	59.28	68.2	-7.29	32.18	6.95	37.5	102	92	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5755 MHz: Fundamental frequency.
3. *: Out of restricted band

EUT Test Condition		Measurement Detail	
Channel	Channel 159	**Frequency Range**	1 GHz ~ 40 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Average (AV)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	59.59	58.4	68.2	-8.61	31.93	6.69	37.43	186	243	Peak
*5725	60.73	59.45	78.2	-17.47	31.96	6.75	37.43	186	243	Peak
5795	88.17	86.82			32.07	6.82	37.54	186	243	Average
5795	97.58	96.23			32.07	6.82	37.54	186	243	Peak
*5850	61.65	60.13	78.2	-16.55	32.15	6.88	37.51	186	243	Peak
*5861	61.53	59.9	68.2	-6.67	32.18	6.95	37.5	186	243	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
*5714	60.33	59.14	68.2	-7.87	31.93	6.69	37.43	101	96	Peak
*5725	60	58.72	78.2	-18.2	31.96	6.75	37.43	101	96	Peak
5795	83.71	82.36			32.07	6.82	37.54	101	96	Average
5795	92.65	91.3			32.07	6.82	37.54	101	96	Peak
*5850	60.29	58.77	78.2	-17.91	32.15	6.88	37.51	101	96	Peak
*5861	60.35	58.72	68.2	-7.85	32.18	6.95	37.5	101	96	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value
2. 5795 MHz: Fundamental frequency.
3. *: Out of restricted band

Mode A (SISO)

9 kHz ~ 30 MHz DATA:

The amplitude of spurious emissions attenuated more than 20 dB below the permissible value is not required to be report.

30 MHz ~ 1 GHz WORST-CASE DATA:

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 38	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	32.36	51.76	43.5	-11.14	11.35	1.14	31.89	124	61	Peak
224.97	36.95	56.91	46	-9.05	10.42	1.4	31.78	100	356	Peak
375.32	36.46	51.81	46	-9.54	14.75	1.84	31.94	137	219	Peak
500.45	29.56	41.76	46	-16.44	17.33	2.09	31.62	119	48	Peak
649.83	31.21	40.66	46	-14.79	20.21	2.36	32.02	138	254	Peak
725.49	32.36	40.3	46	-13.64	21.18	2.5	31.62	106	238	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	36.75	56.15	43.5	-6.75	11.35	1.14	31.89	131	136	Peak
224.97	32.62	52.58	46	-13.38	10.42	1.4	31.78	113	112	Peak
375.32	34.11	49.46	46	-11.89	14.75	1.84	31.94	126	288	Peak
500.45	35.44	47.64	46	-10.56	17.33	2.09	31.62	108	184	Peak
600.36	34.16	44.54	46	-11.84	19.61	2.26	32.25	136	105	Peak
675.05	31.31	40.22	46	-14.69	20.51	2.41	31.83	120	344	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 60	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
174.53	36.68	56.02	43.5	-6.82	11.28	1.16	31.78	102	187	Peak
224.97	37.51	57.47	46	-8.49	10.42	1.4	31.78	133	80	Peak
375.32	36.49	51.84	46	-9.51	14.75	1.84	31.94	138	326	Peak
500.45	28.97	41.17	46	-17.03	17.33	2.09	31.62	107	212	Peak
649.83	31.55	41	46	-14.45	20.21	2.36	32.02	110	273	Peak
725.49	31.64	39.58	46	-14.36	21.18	2.5	31.62	134	110	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	35.72	55.12	43.5	-7.78	11.35	1.14	31.89	104	50	Peak
199.75	34.43	55.55	43.5	-9.07	9.36	1.29	31.77	139	278	Peak
375.32	34.16	49.51	46	-11.84	14.75	1.84	31.94	129	81	Peak
500.45	35.56	47.76	46	-10.44	17.33	2.09	31.62	110	29	Peak
549.92	34.7	46.01	46	-11.3	18.46	2.18	31.95	109	269	Peak
725.49	29.84	37.78	46	-16.16	21.18	2.5	31.62	120	43	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 102	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
174.53	36.63	55.97	43.5	-6.87	11.28	1.16	31.78	131	320	Peak
224.97	37.33	57.29	46	-8.67	10.42	1.4	31.78	127	64	Peak
375.32	36.44	51.79	46	-9.56	14.75	1.84	31.94	109	299	Peak
500.45	29.92	42.12	46	-16.08	17.33	2.09	31.62	131	145	Peak
649.83	31.4	40.85	46	-14.6	20.21	2.36	32.02	119	79	Peak
724.52	32.52	40.5	46	-13.48	21.16	2.49	31.63	120	21	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	37.57	56.97	43.5	-5.93	11.35	1.14	31.89	124	93	Peak
199.75	34.98	56.1	43.5	-8.52	9.36	1.29	31.77	100	96	Peak
375.32	33.95	49.3	46	-12.05	14.75	1.84	31.94	123	270	Peak
500.45	35.48	47.68	46	-10.52	17.33	2.09	31.62	114	113	Peak
600.36	33.87	44.25	46	-12.13	19.61	2.26	32.25	140	101	Peak
675.05	32.22	41.13	46	-13.78	20.51	2.41	31.83	128	302	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 151	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
174.53	36.94	56.28	43.5	-6.56	11.28	1.16	31.78	106	341	Peak
224.97	37.11	57.07	46	-8.89	10.42	1.4	31.78	119	251	Peak
375.32	36.25	51.6	46	-9.75	14.75	1.84	31.94	137	133	Peak
500.45	29.39	41.59	46	-16.61	17.33	2.09	31.62	123	36	Peak
600.36	31.28	41.66	46	-14.72	19.61	2.26	32.25	115	73	Peak
725.49	32.3	40.24	46	-13.7	21.18	2.5	31.62	114	95	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	36.6	56	43.5	-6.9	11.35	1.14	31.89	109	125	Peak
199.75	34.22	55.34	43.5	-9.28	9.36	1.29	31.77	126	194	Peak
375.32	34.6	49.95	46	-11.4	14.75	1.84	31.94	121	302	Peak
500.45	35.71	47.91	46	-10.29	17.33	2.09	31.62	128	75	Peak
600.36	34.85	45.23	46	-11.15	19.61	2.26	32.25	140	68	Peak
725.49	29.45	37.39	46	-16.55	21.18	2.5	31.62	138	189	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

Mode B (MIMO)

802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 48	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
174.53	36.96	56.3	43.5	-6.54	11.28	1.16	31.78	131	37	Peak
224.97	37.91	57.87	46	-8.09	10.42	1.4	31.78	106	221	Peak
375.32	36.58	51.93	46	-9.42	14.75	1.84	31.94	104	287	Peak
500.45	29.24	41.44	46	-16.76	17.33	2.09	31.62	128	355	Peak
600.36	31.95	42.33	46	-14.05	19.61	2.26	32.25	135	177	Peak
725.49	31.77	39.71	46	-14.23	21.18	2.5	31.62	116	195	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	35.67	55.07	43.5	-7.83	11.35	1.14	31.89	132	342	Peak
199.75	34.14	55.26	43.5	-9.36	9.36	1.29	31.77	116	321	Peak
375.32	34.27	49.62	46	-11.73	14.75	1.84	31.94	122	95	Peak
500.45	35.66	47.86	46	-10.34	17.33	2.09	31.62	134	299	Peak
600.36	35.45	45.83	46	-10.55	19.61	2.26	32.25	133	50	Peak
724.52	29.56	37.54	46	-16.44	21.16	2.49	31.63	112	78	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

802.11a

EUT Test Condition		Measurement Detail	
Channel	Channel 60	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
174.53	36.74	56.08	43.5	-6.76	11.28	1.16	31.78	126	56	Peak
224.97	37.58	57.54	46	-8.42	10.42	1.4	31.78	114	300	Peak
375.32	36.36	51.71	46	-9.64	14.75	1.84	31.94	118	331	Peak
500.45	29.64	41.84	46	-16.36	17.33	2.09	31.62	101	205	Peak
649.83	31.6	41.05	46	-14.4	20.21	2.36	32.02	119	45	Peak
725.49	31.7	39.64	46	-14.3	21.18	2.5	31.62	136	41	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	36.26	55.66	43.5	-7.24	11.35	1.14	31.89	109	193	Peak
199.75	34.25	55.37	43.5	-9.25	9.36	1.29	31.77	135	150	Peak
375.32	34.23	49.58	46	-11.77	14.75	1.84	31.94	124	269	Peak
500.45	36.25	48.45	46	-9.75	17.33	2.09	31.62	120	31	Peak
600.36	35.86	46.24	46	-10.14	19.61	2.26	32.25	119	275	Peak
675.05	31.29	40.2	46	-14.71	20.51	2.41	31.83	116	266	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

802.11n (HT40)

EUT Test Condition		Measurement Detail	
Channel	Channel 102	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
174.53	36.83	56.17	43.5	-6.67	11.28	1.16	31.78	104	25	Peak
224.97	37.66	57.62	46	-8.34	10.42	1.4	31.78	106	10	Peak
375.32	36.33	51.68	46	-9.67	14.75	1.84	31.94	108	54	Peak
500.45	28.82	41.02	46	-17.18	17.33	2.09	31.62	111	242	Peak
649.83	32.03	41.48	46	-13.97	20.21	2.36	32.02	137	233	Peak
725.49	31.98	39.92	46	-14.02	21.18	2.5	31.62	101	18	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	34.88	54.28	43.5	-8.62	11.35	1.14	31.89	117	180	Peak
199.75	34.16	55.28	43.5	-9.34	9.36	1.29	31.77	134	64	Peak
375.32	34.37	49.72	46	-11.63	14.75	1.84	31.94	112	260	Peak
500.45	35.61	47.81	46	-10.39	17.33	2.09	31.62	127	100	Peak
600.36	35.7	46.08	46	-10.3	19.61	2.26	32.25	128	252	Peak
725.49	30.11	38.05	46	-15.89	21.18	2.5	31.62	118	216	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

802.11n (HT20)

EUT Test Condition		Measurement Detail	
Channel	Channel 149	**Frequency Range**	30 MHz ~ 1 GHz
Input Power	120 Vac, 60 Hz	**Detector Function**	Peak (PK) Quasi-peak (QP)
Environmental Conditions	25 deg. C, 65 % RH	**Tested By**	Gavin Wu

Antenna Polarity & Test Distance: Horizontal at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
174.53	36.7	56.04	43.5	-6.8	11.28	1.16	31.78	119	153	Peak
224.97	37.93	57.89	46	-8.07	10.42	1.4	31.78	123	217	Peak
375.32	36.61	51.96	46	-9.39	14.75	1.84	31.94	115	205	Peak
600.36	31	41.38	46	-15	19.61	2.26	32.25	104	103	Peak
649.83	31.63	41.08	46	-14.37	20.21	2.36	32.02	119	238	Peak
725.49	31.26	39.2	46	-14.74	21.18	2.5	31.62	122	214	Peak
Antenna Polarity & Test Distance: Vertical at 3 m										
Frequency (MHz)	**Emissino Level (dBuV/m)**	**Read Level (dBuV)**	**Limit (dBuV/m)**	**Margin (dB)**	**Antenna Factor (dB/m)**	**Cable Loss (dB)**	**Preamp Factor (dB)**	**Antenna Height (cm)**	**Table Angle (Degree)**	**Remark**
125.06	35.6	55	43.5	-7.9	11.35	1.14	31.89	115	66	Peak
199.75	33.2	54.32	43.5	-10.3	9.36	1.29	31.77	129	288	Peak
375.32	34.15	49.5	46	-11.85	14.75	1.84	31.94	127	55	Peak
500.45	35.47	47.67	46	-10.53	17.33	2.09	31.62	131	340	Peak
600.36	35.16	45.54	46	-10.84	19.61	2.26	32.25	126	336	Peak
725.49	30.04	37.98	46	-15.96	21.18	2.5	31.62	113	351	Peak

Remarks:

1. Emission Level = Read Level + Antenna Factor + Cable Loss - Preamp Factor
   Margin value = Emission level – Limit value

4.2 Conducted Emission Measurement

4.2.1 Limits of Conducted Emission Measurement

Frequency (MHz)	Conducted Limit (dBuV)	
	Quasi-peak	Average
0.15 - 0.5	66 - 56	56 - 46
0.50 - 5.0	56	46
5.0 - 30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies.
2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50 MHz.

4.2.2 Test Instruments

Description & Manufacturer	Model No.	Serial No.	Date Of Calibration	Due Date Of Calibration
Test Receiver ROHDE & SCHWARZ	ESCI	100613	Nov. 16, 2015	Nov. 15, 2016
RF signal cable Woken	5D-FB	Cable-HYC01-01	Dec. 26, 2014	Dec. 25, 2015
LISN ROHDE & SCHWARZ (EUT)	ESH3-Z5	835239/001	Feb. 26, 2015	Feb. 25, 2016
LISN ROHDE & SCHWARZ (Peripheral)	ESH3-Z5	100311	Jul. 24, 2015	Jul. 23, 2016
Software ADT	BV ADT_Cond_ V7.3.7.3	NA	NA	NA

Note: 1. The calibration interval of the above test instruments is 12 months and the calibrations are traceable to NML/ROC and NIST/USA.
2. The test was performed in HwaYa Shielded Room 1.
3. The VCCI Site Registration No. is C-2040.

4.2.3 Test Procedures

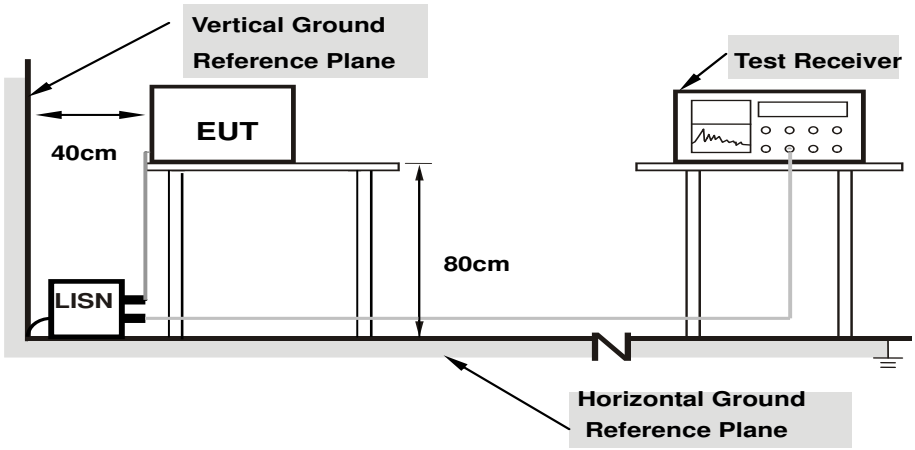
a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN). Other support units were connected to the power mains through another LISN. The two LISNs provide 50 ohm/ 50uH of coupling impedance for the measuring instrument.
b. Both lines of the power mains connected to the EUT were checked for maximum conducted interference.
c. The frequency range from 150 kHz to 30 MHz was searched. Emission levels under (Limit -20 dB) was not recorded.

NOTE: All modes of operation were investigated and the worst-case emissions are reported.

4.2.4 Deviation from Test Standard

No deviation.

4.2.5 Test Setup



Note: 1.Support units were connected to second LISN.
2.Both of LISNs (AMN) are 80 cm from EUT and at least 80 from other units and other metal planes

For the actual test configuration, please refer to the attached file (Test Setup Photo).

4.2.6 EUT Operating Conditions

a. Placed the EUT on a testing table.
b. Use the software to control the EUT under transmission condition continuously at specific channel frequency.

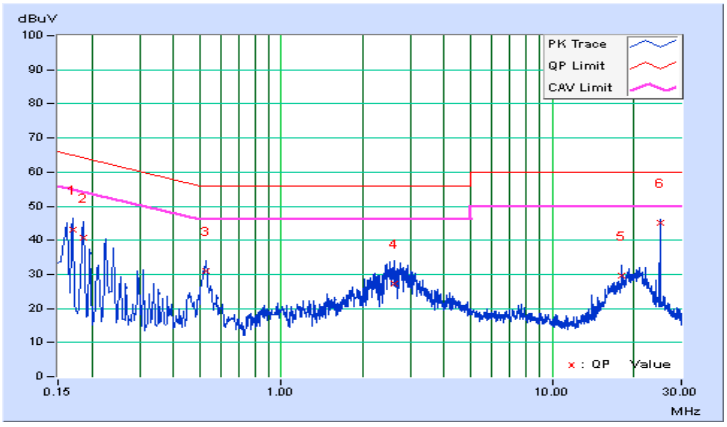
4.2.7 Test Results

Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Toby Tian	Test Date	2015/11/24

Phase Of Power : Line (L)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.16955	9.83	33.33	14.14	43.16	23.97	64.98	54.98	-21.82	-31.01
2	0.18519	9.83	30.91	11.49	40.74	21.32	64.25	54.25	-23.51	-32.93
3	0.52927	9.89	20.98	13.01	30.87	22.90	56.00	46.00	-25.13	-23.10
4	2.60157	10.04	17.38	5.22	27.42	15.26	56.00	46.00	-28.58	-30.74
5	18.06171	10.98	18.63	13.26	29.61	24.24	60.00	50.00	-30.39	-25.76
6	**25.00196**	**11.28**	**33.98**	**34.92**	**45.26**	**46.20**	**60.00**	**50.00**	**-14.74**	**-3.80**

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value

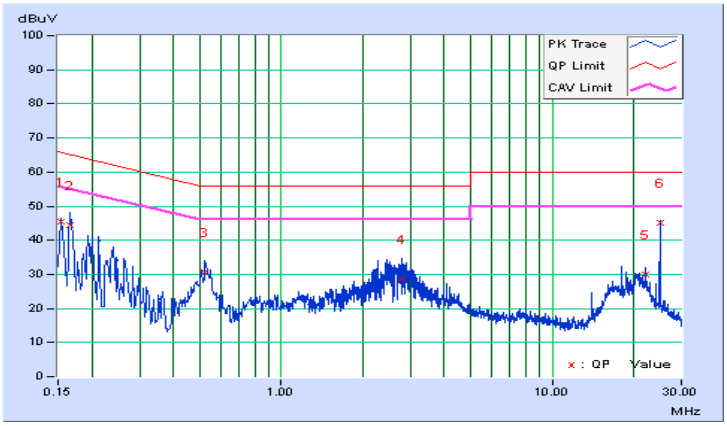


Frequency Range	150kHz ~ 30MHz	Detector Function & Resolution Bandwidth	Quasi-Peak (QP) / Average (AV), 9kHz
Input Power	120Vac, 60Hz	Environmental Conditions	25℃, 65%RH
Tested by	Toby Tian	Test Date	2015/11/24

Phase Of Power : Neutral (N)										
No	Frequency (MHz)	Correction Factor (dB)	Reading Value (dBuV)		Emission Level (dBuV)		Limit (dBuV)		Margin (dB)	
			Q.P.	AV.	Q.P.	AV.	Q.P.	AV.	Q.P.	AV.
1	0.15391	9.82	35.62	23.62	45.44	33.44	65.79	55.79	-20.35	-22.35
2	0.16569	9.82	34.49	15.02	44.31	24.84	65.17	55.17	-20.86	-30.33
3	0.52145	9.89	20.76	11.91	30.65	21.80	56.00	46.00	-25.35	-24.20
4	2.79707	10.05	18.60	7.53	28.65	17.58	56.00	46.00	-27.35	-28.42
5	22.07337	10.97	19.13	15.44	30.10	26.41	60.00	50.00	-29.90	-23.59
6	25.00196	11.04	34.08	34.43	45.12	45.47	60.00	50.00	-14.88	-4.53

Remarks:

1. Q.P. and AV. are abbreviations of quasi-peak and average individually.
2. The emission levels of other frequencies were very low against the limit.
3. Margin value = Emission level – Limit value
4. Correction factor = Insertion loss + Cable loss
5. Emission Level = Correction Factor + Reading Value



4.3 Transmit Power Measurment

4.3.1 Limits of Transmit Power Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	1 Watt (30 dBm) (Max. e.i.r.p ≦ 125 mW (21 dBm) at any elevation angle above 30 degrees as measured from the horizon)
		Fixed point-to-point Access Point	1 Watt (30 dBm)
		Indoor Access Point	1 Watt (30 dBm)
	√	Mobile and Portable client device	250 mW (24 dBm)
U-NII-2A	√		250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-2C	√		250 mW (24 dBm) or 11 dBm+10 log B*
U-NII-3	√		1 Watt (30 dBm)

*B is the 26 dB emission bandwidth in megahertz

Per KDB 662911 Method of conducted output power measurement on IEEE 802.11 devices,

Array Gain = 0 dB (i.e., no array gain) for $N_{ANT} \leq 4$;

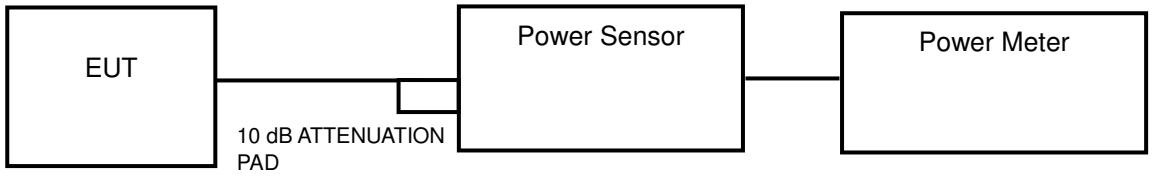
Array Gain = 0 dB (i.e., no array gain) for channel widths ≥ 40 MHz for any N_{ANT};

Array Gain = 5 log(N_{ANT}/N_{SS}) dB or 3 dB, whichever is less for 20 MHz channel widths with $N_{ANT} \geq 5$.

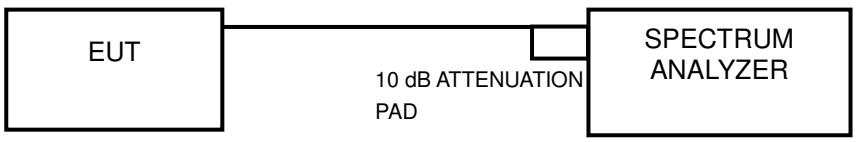
For power measurements on all other devices: Array Gain = 10 log(N_{ANT}/N_{SS}) dB.

4.3.2 Test Setup

<Power Output Measurement>



<26 dB Bandwidth>



4.3.3 Test Instruments

Refer to section 4.1.2 to get information of above instrument.

4.3.4 Test Procedure

Average Power Measurement

<802.11a, 802.11n (HT20), 802.11n (HT40)>

Method PM is used to perform output power measurement, trigger and gating function of wide band power meter is enabled to measure max output power of TX on burst. Duty factor is not added to measured value.

26 dB Bandwidth

1) Set RBW = approximately 1 % of the emission bandwidth.
2) Set the VBW > RBW.
3) Detector = Peak.
4) Trace mode = max hold.
5) Measure the maximum width of the emission that is 26 dB down from the peak of the emission. Compare this with the RBW setting of the analyzer. Readjust RBW and repeat measurement as needed until the RBW/EBW ratio is approximately 1 %.

4.3.5 Deviation fromTest Standard

No deviation.

4.3.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.3.7 Test Result

Power Output:

802.11a

FOR 1TX USE

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	17.58	12.45	24	Pass
44	5220	24.60	13.91	24	Pass
48	5240	25.70	14.10	24	Pass
52	5260	21.09	13.24	24	Pass
60	5300	21.73	13.37	24	Pass
64	5320	26.85	14.29	24	Pass
100	5500	20.32	13.08	24	Pass
116	5580	21.28	13.28	24	Pass
140	5700	19.91	12.99	24	Pass
149	5745	6.75	8.29	30	Pass
157	5785	8.85	9.47	30	Pass
165	5825	7.40	8.69	30	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (22.88) = 24.59dBm > 24 dBm.
2. 11 dBm + 10log (24.48) = 24.89dBm > 24 dBm.
3. 11 dBm + 10log (29.33) = 25.67dBm > 24 dBm.
4. 11 dBm + 10log (29.17) = 25.65dBm > 24 dBm.
5. 11 dBm + 10log (29.46) = 25.69dBm > 24 dBm.
6. 11 dBm + 10log (39.17) = 26.93dBm > 24 dBm.

FOR 2TX USE

Channel	Frequency (MHz)	Maximum Cunducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.62	8.75	19.03	12.80	24	Pass
44	5220	12.35	9.85	26.84	14.29	24	Pass
48	5240	12.46	9.92	27.44	14.38	24	Pass
52	5260	11.42	9.33	22.44	13.51	24	Pass
60	5300	11.50	9.86	23.81	13.77	24	Pass
64	5320	12.55	10.29	28.68	14.58	24	Pass
100	5500	10.30	10.39	21.65	13.36	24	Pass
116	5580	9.84	10.71	21.41	13.31	24	Pass
140	5700	9.38	10.55	20.02	13.01	24	Pass
149	5745	5.43	5.74	7.24	8.60	30	Pass
157	5785	6.23	6.77	8.95	9.52	30	Pass
165	5825	5.78	6.45	8.20	9.14	30	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

CHAIN 0

1. 11 dBm + 10log (23.88) = 24.78dBm > 24 dBm.
2. 11 dBm + 10log (26.46) = 25.23dBm > 24 dBm.
3. 11 dBm + 10log (25.37) = 25.04dBm > 24 dBm.
4. 11 dBm + 10log (22.47) = 24.52dBm > 24 dBm.
5. 11 dBm + 10log (20.62) = 24.14dBm > 24 dBm.
6. 11 dBm + 10log (21.28) = 24.28dBm > 24 dBm.

CHAIN 1

1. 11 dBm + 10log (34.81) = 26.42dBm > 24 dBm.
2. 11 dBm + 10log (38.11) = 26.81dBm > 24 dBm.
3. 11 dBm + 10log (35.86) = 26.55dBm > 24 dBm.
4. 11 dBm + 10log (23.88) = 24.78dBm > 24 dBm.
5. 11 dBm + 10log (25.51) = 25.07dBm > 24 dBm.
6. 11 dBm + 10log (25.55) = 25.07dBm > 24 dBm.

802.11n (HT20)

FOR 1TX USE

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
36	5180	15.38	11.87	24	Pass
44	5220	17.10	12.33	24	Pass
48	5240	17.18	12.35	24	Pass
52	5260	17.22	12.36	24	Pass
60	5300	14.83	11.71	24	Pass
64	5320	14.62	11.65	24	Pass
100	5500	16.26	12.11	24	Pass
116	5580	16.11	12.07	24	Pass
140	5700	14.79	11.70	24	Pass
149	5745	8.47	9.28	30	Pass
157	5785	7.36	8.67	30	Pass
165	5825	6.92	8.4	30	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (22.04) = 24.43dBm > 24 dBm.
2. 11 dBm + 10log (20.68) = 24.16dBm > 24 dBm.
3. 11 dBm + 10log (23.42) = 24.70dBm > 24 dBm.
4. 11 dBm + 10log (27.21) = 25.35dBm > 24 dBm.
5. 11 dBm + 10log (27.37) = 25.37dBm > 24 dBm.
6. 11 dBm + 10log (40.96) = 27.12dBm > 24 dBm.

FOR 2TX USE

Channel	Frequency (MHz)	Maximum Cunducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
36	5180	10.12	7.65	16.10	12.07	24	Pass
44	5220	10.48	7.98	17.45	12.42	24	Pass
48	5240	10.43	7.91	17.22	12.36	24	Pass
52	5260	10.70	8.02	18.09	12.57	24	Pass
60	5300	9.86	7.42	15.20	11.82	24	Pass
64	5320	9.85	7.56	15.36	11.86	24	Pass
100	5500	9.30	9.32	17.06	12.32	24	Pass
116	5580	8.76	9.42	16.27	12.11	24	Pass
140	5700	8.38	9.31	15.42	11.88	24	Pass
149	5745	5.78	6.74	8.50	9.30	30	Pass
157	5785	5.43	6.51	7.96	9.01	30	Pass
165	5825	5.18	6.34	7.60	8.81	30	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

CHAIN 0

1. 11 dBm + 10log (22.34) = 24.49dBm > 24 dBm.
2. 11 dBm + 10log (21.32) = 24.29dBm > 24 dBm.
3. 11 dBm + 10log (20.81) = 24.18dBm > 24 dBm.
4. 11 dBm + 10log (22.43) = 24.51dBm > 24 dBm.
5. 11 dBm + 10log (20.91) = 24.20dBm > 24 dBm.
6. 11 dBm + 10log (22.63) = 24.55dBm > 24 dBm.

CHAIN 1

1. 11 dBm + 10log (27.78) = 25.44dBm > 24 dBm.
2. 11 dBm + 10log (25.36) = 25.04dBm > 24 dBm.
3. 11 dBm + 10log (22.91) = 24.60dBm > 24 dBm.
4. 11 dBm + 10log (22.91) = 24.60dBm > 24 dBm.
5. 11 dBm + 10log (22.84) = 24.59dBm > 24 dBm.
6. 11 dBm + 10log (23.98) = 24.80dBm > 24 dBm.

802.11n (HT40)

FOR 1TX USE

Channel	Frequency (MHz)	Maximum Conducted Power (mW)	Maximum Conducted Power (dBm)	Power Limit (dBm)	Pass / Fail
38	5190	15.49	11.90	24	Pass
46	5230	17.22	12.36	24	Pass
54	5270	14.19	11.52	24	Pass
62	5310	14.66	11.66	24	Pass
102	5510	15.52	11.91	24	Pass
110	5550	14.22	11.53	24	Pass
134	5670	15.92	12.02	24	Pass
151	5755	7.59	8.8	30	Pass
159	5795	7.10	8.51	30	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

1. 11 dBm + 10log (53.74) = 28.30dBm > 24 dBm.
2. 11 dBm + 10log (54.26) = 28.34dBm > 24 dBm.
3. 11 dBm + 10log (79.83) = 30.02dBm > 24 dBm.
4. 11 dBm + 10log (73.86) = 29.68dBm > 24 dBm.
5. 11 dBm + 10log (86.16) = 30.35dBm > 24 dBm.

FOR 2TX USE

Channel	Frequency (MHz)	Maximum Cunducted Power (dBm)		Total Power (mW)	Total Power (dBm)	Power Limit (dBm)	Pass / Fail
		Chain 0	Chain 1				
38	5190	10.15	7.66	16.19	12.09	24	Pass
46	5230	10.57	7.87	17.53	12.44	24	Pass
54	5270	9.67	6.96	14.23	11.53	24	Pass
62	5310	9.81	7.21	14.83	11.71	24	Pass
102	5510	9.28	9.04	16.49	12.17	24	Pass
110	5550	8.68	8.99	15.30	11.85	24	Pass
134	5670	8.55	9.51	16.09	12.07	24	Pass
151	5755	6.04	6.43	8.413	9.25	30	Pass
159	5795	5.88	6.15	7.994	9.03	30	Pass

NOTE:

For U-NII-2A, U-NII-2C Band:

CHAIN 0

1. 11 dBm + 10log (47.90) = 27.80dBm > 24 dBm.
2. 11 dBm + 10log (48.16) = 27.83dBm > 24 dBm.
3. 11 dBm + 10log (55.44) = 28.44dBm > 24 dBm.
4. 11 dBm + 10log (52.82) = 28.23dBm > 24 dBm.
5. 11 dBm + 10log (49.83) = 27.97dBm > 24 dBm.

CHAIN 1

1. 11 dBm + 10log (60.22) = 28.80dBm > 24 dBm.
2. 11 dBm + 10log (66.51) = 29.23dBm > 24 dBm.
3. 11 dBm + 10log (56.29) = 28.50dBm > 24 dBm.
4. 11 dBm + 10log (55.30) = 28.43dBm > 24 dBm.
5. 11 dBm + 10log (66.22) = 29.21dBm > 24 dBm.

26 dB Bandwidth:

802.11a

FOR 1TX USE

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	Pass / Fail
36	5180	20.26	Pass
44	5220	23.49	Pass
48	5240	28.26	Pass
52	5260	22.88	Pass
60	5300	24.48	Pass
64	5320	29.33	Pass
100	5500	29.17	Pass
116	5580	29.46	Pass
140	5700	39.17	Pass

FOR 2TX USE

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	24.44	38.03	Pass
44	5220	24.96	39.81	Pass
48	5240	24.14	38.03	Pass
52	5260	23.88	34.81	Pass
60	5300	26.46	38.11	Pass
64	5320	25.37	35.86	Pass
100	5500	22.47	23.88	Pass
116	5580	20.62	25.51	Pass
140	5700	21.28	25.55	Pass

802.11n (HT20)

FOR 1TX USE

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	Pass / Fail
36	5180	22.37	Pass
44	5220	21.63	Pass
48	5240	22.79	Pass
52	5260	22.04	Pass
60	5300	20.68	Pass
64	5320	23.42	Pass
100	5500	27.21	Pass
116	5580	27.37	Pass
140	5700	40.96	Pass

FOR 2TX USE

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
36	5180	22.02	26.43	Pass
44	5220	20.85	26.77	Pass
48	5240	22.85	27.91	Pass
52	5260	22.34	27.78	Pass
60	5300	21.32	25.36	Pass
64	5320	20.81	22.91	Pass
100	5500	22.43	22.91	Pass
116	5580	20.91	22.84	Pass
140	5700	22.63	23.98	Pass

802.11n (HT40)

FOR 1TX USE

Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)	Pass / Fail
38	5190	52.67	Pass
46	5230	55.38	Pass
54	5270	53.74	Pass
62	5310	54.26	Pass
102	5510	79.83	Pass
110	5550	73.86	Pass
134	5670	86.16	Pass

FOR 2TX USE

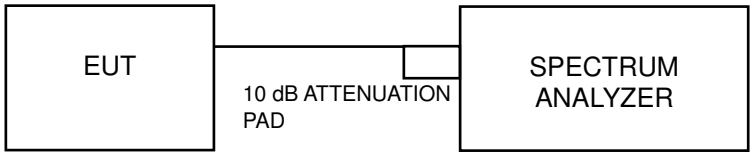
Channel	Frequency (MHz)	26 dBc Bandwidth (MHz)		Pass / Fail
		Chain 0	Chain 1	
38	5190	53.59	65.95	Pass
46	5230	46.40	71.49	Pass
54	5270	47.90	60.22	Pass
62	5310	48.16	66.51	Pass
102	5510	55.44	56.29	Pass
110	5550	52.82	55.30	Pass
134	5670	49.83	66.22	Pass

4.4 Peak Power Spectral Density Measurement

4.4.1 Limits of Peak Power Spectral Density Measurement

Operation Band	EUT Category		Limit
U-NII-1		Outdoor Access Point	17 dBm/MHz
		Fixed point-to-point Access Point	
		Indoor Access Point	
	√	Mobile and Portable client device	11 dBm/MHz
U-NII-2A	√		11 dBm/MHz
U-NII-2C	√		11 dBm/MHz
U-NII-3	√		30 dBm/500 kHz

4.4.2 Test Setup



4.4.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

4.4.4 Test Procedures

For U-NII-1, U-NII-2A, U-NII-2C band:

Using method SA-2

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 1 MHz, Set VBW ≥ 3 MHz, Detector = RMS
3. Sweep time = auto, trigger set to “free run”.
4. Trace average at least 100 traces in power averaging mode.
5. Record the max value and add 10 log (1/duty cycle)

※For U-NII-3:

1. Set span to encompass the entire emission bandwidth (EBW) of the signal.
2. Set RBW = 300 kHz, Set VBW ≥ 1 MHz, Detector = RMS
3. Use the peak marker function to determine the maximum power level in any 300 kHz band segment within the fundamental EBW.
4. Scale the observed power level to an equivalent value in 500 kHz by adjusting (reducing) the measured power by a bandwidth correction factor (BWCF) where BWCF = 10log(500 kHz/300 kHz)
5. Sweep time = auto, trigger set to “free run”.
6. Trace average at least 100 traces in power averaging mode.
7. Record the max value and add 10 log (1/duty cycle)

4.4.5 Deviation from Test Standard

No deviation.

4.4.6 EUT Operating Conditions

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.4.7 Test Results

For U-NII-1, U-NII-2A, U-NII-2C Band

802.11a

FOR 1TX USE

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	0.28	0.22	0.50	11	Pass
44	5220	1.51	0.22	1.73	11	Pass
48	5240	1.61	0.22	1.83	11	Pass
52	5260	0.89	0.22	1.11	11	Pass
60	5300	0.97	0.22	1.19	11	Pass
64	5320	1.75	0.22	1.97	11	Pass
100	5500	-0.20	0.22	0.02	11	Pass
116	5580	0.31	0.22	0.53	11	Pass
140	5700	0.44	0.22	0.66	11	Pass

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

FOR 2TX USE

Channel	Frequency (MHz)	PSD (dBm)		Total PSD w/o Duty Factor (dBm)	Duty Factor	Total PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
36	5180	-0.64	-2.27	1.63	0.22	1.85	11	Pass
44	5220	-0.55	-1.96	1.81	0.22	2.03	11	Pass
48	5240	-0.57	-1.76	1.89	0.22	2.10	11	Pass
52	5260	-0.49	-1.63	1.99	0.22	2.20	11	Pass
60	5300	-0.58	-1.40	2.04	0.22	2.26	11	Pass
64	5320	-0.70	-1.27	2.03	0.22	2.25	11	Pass
100	5500	-2.69	-1.74	0.82	0.22	1.04	11	Pass
116	5580	-3.56	-1.33	0.71	0.22	0.92	11	Pass
140	5700	-3.92	-1.97	0.17	0.22	0.39	11	Pass

NOTE:

1. Directional gain = -2.21 dBi + 10log(2) = 0.8 dBi < 6 dBi , so the power density limit no need to be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

FOR 1TX USE

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
36	5180	-2.26	0.24	-2.02	11	Pass
44	5220	-2.27	0.24	-2.03	11	Pass
48	5240	-2.13	0.24	-1.89	11	Pass
52	5260	-2.02	0.24	-1.78	11	Pass
60	5300	-2.65	0.24	-2.41	11	Pass
64	5320	-2.58	0.24	-2.34	11	Pass
100	5500	-1.20	0.24	-0.96	11	Pass
116	5580	-2.63	0.24	-2.39	11	Pass
140	5700	-1.97	0.24	-1.73	11	Pass

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

FOR 2TX USE

Channel	Frequency (MHz)	PSD (dBm)		Total PSD w/o Duty Factor (dBm)	Duty Factor	Total PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
36	5180	-2.41	-4.66	-0.38	0.23	-0.15	11	Pass
44	5220	-2.15	-4.50	-0.16	0.23	0.08	11	Pass
48	5240	-2.06	-4.27	-0.02	0.23	0.22	11	Pass
52	5260	-2.02	-4.02	0.10	0.23	0.34	11	Pass
60	5300	-2.90	-4.85	-0.76	0.23	-0.52	11	Pass
64	5320	-3.08	-4.67	-0.79	0.23	-0.56	11	Pass
100	5500	-3.88	-3.53	-0.69	0.23	-0.46	11	Pass
116	5580	-4.55	-3.07	-0.74	0.23	-0.50	11	Pass
140	5700	-4.48	-2.62	-0.44	0.23	-0.21	11	Pass

NOTE:

1. Directional gain = -2.21 dBi + 10log(2) = 0.8 dBi < 6 dBi , so the power density limit no need to be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

FOR 1TX USE

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor	PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
38	5190	-5.35	0.58	-4.77	11	Pass
46	5230	-5.30	0.58	-4.72	11	Pass
54	5270	-5.91	0.58	-5.33	11	Pass
62	5310	-5.65	0.58	-5.07	11	Pass
102	5510	-4.91	0.58	-4.33	11	Pass
110	5550	-5.94	0.58	-5.36	11	Pass
134	5670	-5.80	0.58	-5.22	11	Pass

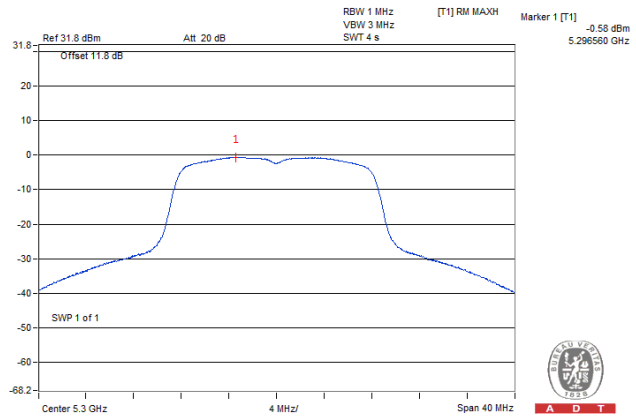
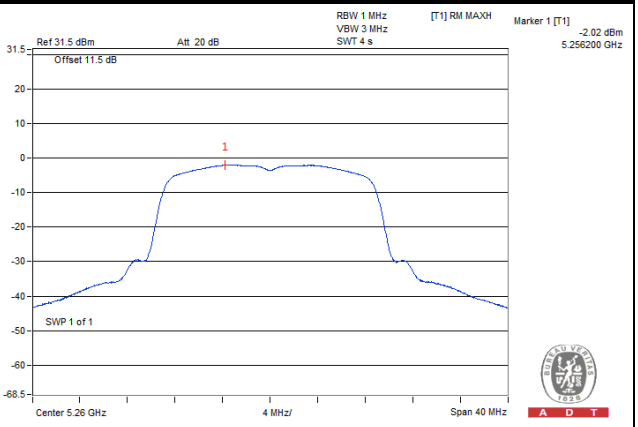
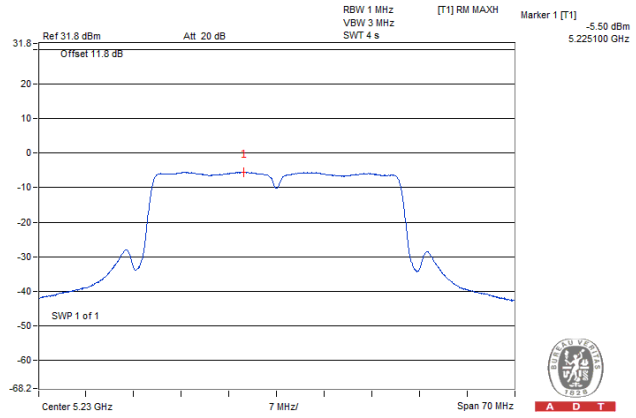
NOTE: Refer to section 3.3 for duty cycle spectrum plot.

FOR 2TX USE

Channel	Frequency (MHz)	PSD (dBm)		Total PSD w/o Duty Factor (dBm)	Duty Factor	Total PSD with Duty Factor (dBm)	Maximum Limit (dBm)	Pass / Fail
		Chain 0	Chain 1					
38	5190	-5.77	-7.95	-3.71	0.47	-3.25	11	Pass
46	5230	-5.50	-7.73	-3.46	0.47	-3.00	11	Pass
54	5270	-6.54	-8.30	-4.32	0.47	-3.85	11	Pass
62	5310	-6.55	-8.09	-4.24	0.47	-3.78	11	Pass
102	5510	-7.35	-6.82	-4.07	0.47	-3.60	11	Pass
110	5550	-7.81	-6.63	-4.17	0.47	-3.70	11	Pass
134	5670	-7.70	-5.57	-3.50	0.47	-3.03	11	Pass

NOTE:

1. Directional gain = -2.21 dBi + 10log(2) = 0.8 dBi < 6 dBi , so the power density limit no need to be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value	
802.11a	802.11n (HT20)
	
802.11n (HT40)	
	

For U-NII-3 Band

802.11a

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor	PSD with Duty Factor (dBm)	Limit (dBm/500 kHz)	Pass / Fail
149	5745	-7.28	0.22	-7.06	30	Pass
157	5785	-7.33	0.22	-7.11	30	Pass
165	5825	-6.24	0.22	-6.02	30	Pass

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

FOR 2TX USE

TX Chain	Channel	Frequency (MHz)	PSD (dBm/500 kHz)	10 log (N=2) dB	Total PSD without Duty Factor (dBm/500 kHz)	Duty Factor	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	149	5745	-10.20	3.01	-7.19	0.22	-6.97	30	Pass
	157	5785	-9.30	3.01	-6.29	0.22	-6.07	30	Pass
	165	5825	-9.10	3.01	-6.09	0.22	-5.87	30	Pass
1	149	5745	-8.97	3.01	-5.96	0.22	-5.74	30	Pass
	157	5785	-8.21	3.01	-5.20	0.22	-4.98	30	Pass
	165	5825	-8.10	3.01	-5.09	0.22	-4.87	30	Pass

NOTE:

1. Directional gain = -1.93 dBi + 10log(2) = 1.08 dBi < 6 dBi , so the power density limit no need to be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT20)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor	PSD with Duty Factor (dBm)	Limit (dBm/500 kHz)	Pass / Fail
149	5745	-6.74	0.24	-6.50	30	Pass
157	5785	-6.74	0.24	-6.50	30	Pass
165	5825	-6.50	0.24	-6.26	30	Pass

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

FOR 2TX USE

TX Chain	Channel	Frequency (MHz)	PSD (dBm/500 kHz)	10 log (N=2) dB	Total PSD without Duty Factor (dBm/500 kHz)	Duty Factor	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	149	5745	-9.39	3.01	-6.38	0.23	-6.15	30	Pass
	157	5785	-9.63	3.01	-6.62	0.23	-6.39	30	Pass
	165	5825	-9.34	3.01	-6.33	0.23	-6.10	30	Pass
1	149	5745	-8.25	3.01	-5.24	0.23	-5.01	30	Pass
	157	5785	-8.58	3.01	-5.57	0.23	-5.34	30	Pass
	165	5825	-8.64	3.01	-5.63	0.23	-5.40	30	Pass

NOTE:

1. Directional gain = -1.93 dBi + 10log(2) = 1.08 dBi < 6 dBi , so the power density limit no need to be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

802.11n (HT40)

Channel	Frequency (MHz)	PSD w/o Duty Factor (dBm)	Duty Factor	PSD with Duty Factor (dBm)	Limit (dBm/500 kHz)	Pass / Fail
151	5755	-10.43	0.58	-9.85	30	Pass
159	5795	-10.26	0.58	-9.68	30	Pass

NOTE: Refer to section 3.3 for duty cycle spectrum plot.

FOR 2TX USE

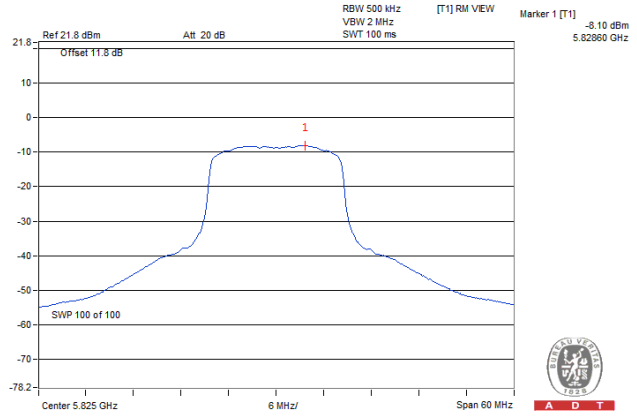
TX Chain	Channel	Frequency (MHz)	PSD (dBm/500 kHz)	10 log (N=2) dB	Total PSD without Duty Factor (dBm/500 kHz)	Duty Factor	Total PSD with Duty Factor (dBm/500 kHz)	Limit (dBm/500 kHz)	Pass / Fail
0	151	5755	-13.15	3.01	-10.14	0.47	-9.67	30	Pass
	159	5795	-13.22	3.01	-10.21	0.47	-9.74	30	Pass
1	151	5755	-12.04	3.01	-9.03	0.47	-8.56	30	Pass
	159	5795	-12.11	3.01	-9.10	0.47	-8.63	30	Pass

NOTE:

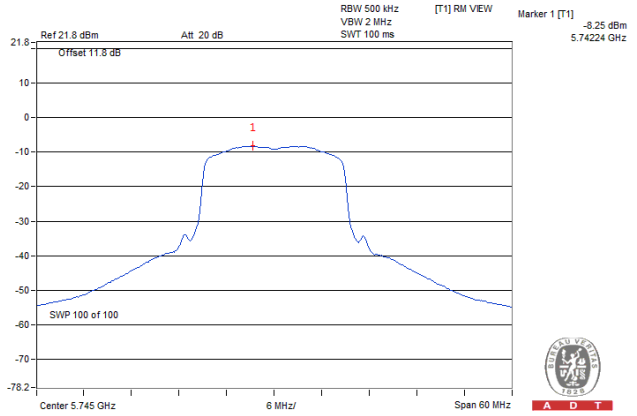
1. Directional gain = -1.93 dBi + 10log(2) = 1.08 dBi < 6 dBi , so the power density limit no need to be reduced.
2. Refer to section 3.3 for duty cycle spectrum plot.

Spectrum Plot of Worst Value

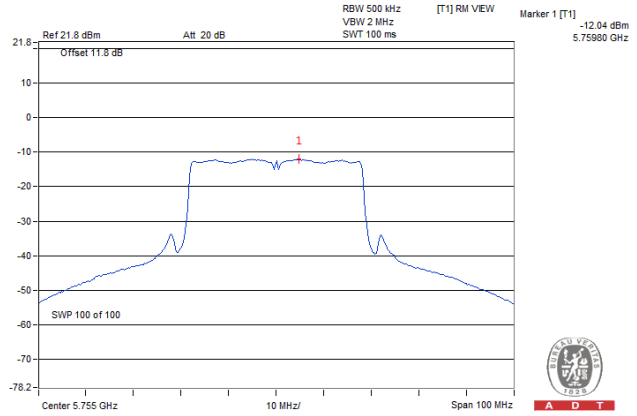
802.11a



802.11n (HT20)



802.11n (HT40)

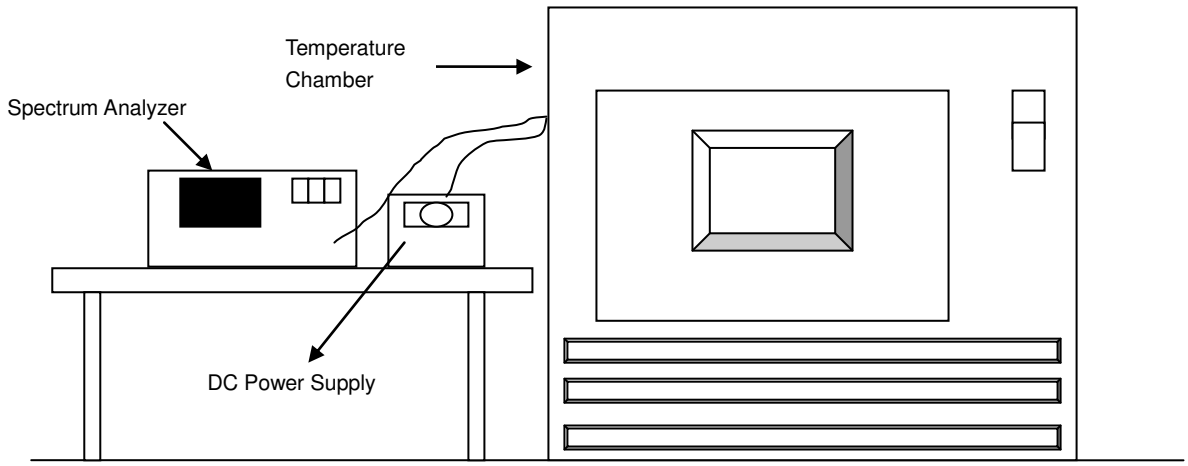


4.5 Frequency Stability

4.5.1 Limit of Frequency Stability Measurement

The frequency of the carrier signal shall be maintained within band of operation

4.5.2 Test Setup



4.5.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

4.5.4 Test Procedure

a. To ensure emission at the band edge is maintained within the authorized band, those values shall be measured by radiation emissions at upper and lower frequency points, and finally compensated by frequency deviation as procedures below.
b. The EUT was operated at the maximum output power, and connected to the spectrum analyzer, which is set to maximum hold function and peak detector. The peak value of the power envelope was measured and noted. The upper and lower frequency points were respectively measured relatively 10 dB lower than the measured peak value.
c. The frequency deviation was calculated by adding the upper frequency point and the lower frequency point divided by two. Those detailed values of frequency deviation are provided in table below.

4.5.5 Deviation from Test Standard

No deviation.

4.5.6 EUT Operating Condition

Set the EUT transmit at un-modulation mode to test frequency stability.

4.5.7 Test Results

Frequency Stability Versus Temp.									
Operating Frequency: 5320 MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
50	3.8	5320.026473	4.976	5320.027130	5.100	5320.026585	4.997	5320.026620	5.004
40	3.8	5320.026712	5.021	5320.026454	4.973	5320.027262	5.124	5320.027146	5.103
30	3.8	5320.027735	5.213	5320.028191	5.299	5320.028275	5.315	5320.028080	5.278
20	3.8	5320.028878	5.428	5320.029215	5.492	5320.029110	5.472	5320.029115	5.473
10	3.8	5320.030288	5.693	5320.030207	5.678	5320.030703	5.771	5320.030349	5.705
0	3.8	5320.029169	5.483	5320.028729	5.400	5320.029572	5.559	5320.029322	5.512
-10	3.8	5320.027730	5.212	5320.027447	5.159	5320.027398	5.150	5320.027837	5.233
-20	3.8	5320.027278	5.127	5320.026862	5.049	5320.027115	5.097	5320.027264	5.125
-30	3.8	5320.025976	4.883	5320.025981	4.884	5320.025798	4.849	5320.026131	4.912

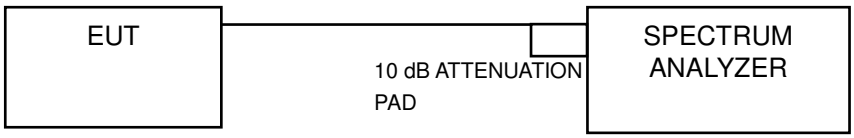
Frequency Stability Versus Temp.									
Operating Frequency: 5320 MHz									
Temp. (℃)	Power Supply (Vdc)	0 Minute		2 Minute		5 Minute		10 Minute	
		Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)	Measured Frequency (MHz)	Frequency Drift (ppm)
20	3.23	5320.034730	6.528	5320.034935	6.567	5320.034548	6.494	5320.034331	6.453
	3.8	5320.028878	5.428	5320.029215	5.492	5320.029110	5.472	5320.029115	5.473
	4.37	5320.036038	6.774	5320.036400	6.842	5320.036311	6.825	5320.036153	6.796

4.6 6 dB Bandwidth Measurment

4.6.1 Limits of 6 dB Bandwidth Measurement

The minimum of 6 dB Bandwidth Measurement is 0.5 MHz.

4.6.2 Test Setup



4.6.3 Test Instruments

Refer to section 4.1.3 to get information of above instrument.

4.6.4 Test Procedure

MEASUREMENT PROCEDURE REF

a. Set resolution bandwidth (RBW) = 100 kHz
b. Set the video bandwidth (VBW) ≥ 3 x RBW, Detector = Peak.
c. Trace mode = max hold.
d. Sweep = auto couple.
e. Measure the maximum width of the emission that is constrained by the frequencies associated with the two amplitude points (upper and lower) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission

4.6.5 Deviation from Test Standard

No deviation.

4.6.6 EUT Operating Condition

The software provided by client to enable the EUT under transmission condition continuously at lowest, middle and highest channel frequencies individually.

4.6.7 Test Results

802.11a

FOR 1TX USE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.57	0.5	Pass
157	5785	15.47	0.5	Pass
165	5825	15.69	0.5	Pass

FOR 2TX USE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	15.44	16.31	0.5	Pass
157	5785	15.86	15.82	0.5	Pass
165	5825	15.81	16.34	0.5	Pass

802.11n (HT20)

FOR 1TX USE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
149	5745	15.57	0.5	Pass
157	5785	15.33	0.5	Pass
165	5825	15.40	0.5	Pass

FOR 2TX USE

Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
149	5745	15.50	16.35	0.5	Pass
157	5785	15.52	16.35	0.5	Pass
165	5825	15.49	16.35	0.5	Pass

802.11n (HT40)

FOR 1TX USE

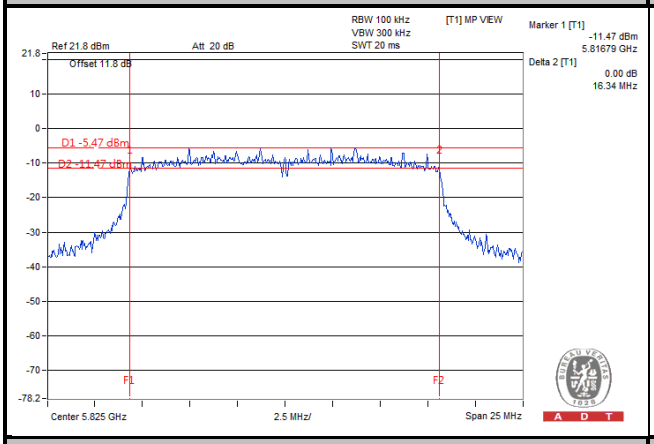
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)	Minimum Limit (MHz)	Pass / Fail
151	5755	36.40	0.5	Pass
159	5795	36.24	0.5	Pass

FOR 2TX USE

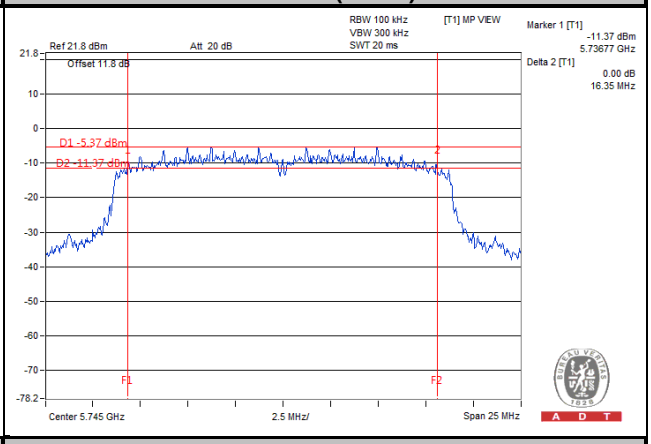
Channel	Frequency (MHz)	6 dB Bandwidth (MHz)		Minimum Limit (MHz)	Pass / Fail
		Chain 0	Chain 1		
151	5755	36.44	36.39	0.5	Pass
159	5795	36.43	36.43	0.5	Pass

Spectrum Plot of Worst Value

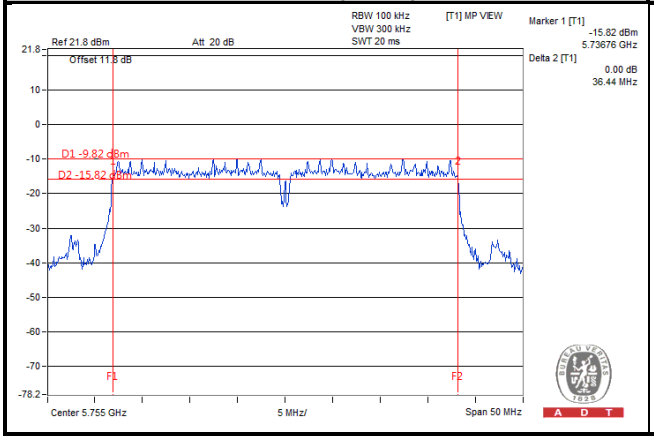
802.11a



802.11n (HT20)



802.11n (HT40)



5 Pictures of Test Arrangements

Please refer to the attached file (Test Setup Photo).

Appendix – Information on the Testing Laboratories

We, Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch, were founded in 1988 to provide our best service in EMC, Radio, Telecom and Safety consultation. Our laboratories are accredited and approved according to ISO/IEC 17025.

If you have any comments, please feel free to contact us at the following:

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Web Site: www.bureauveritas-adt.com

The address and road map of all our labs can be found in our web site also.

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